

T-cell Transmigration Assays

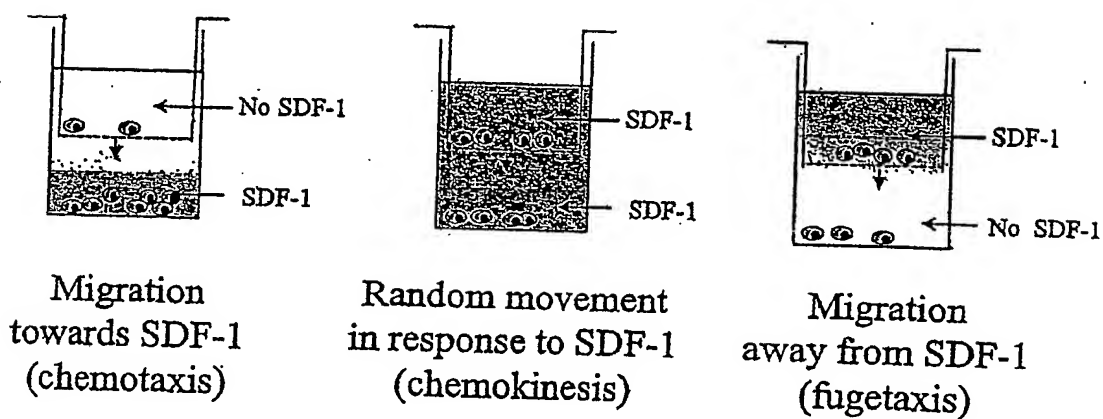


FIGURE 1

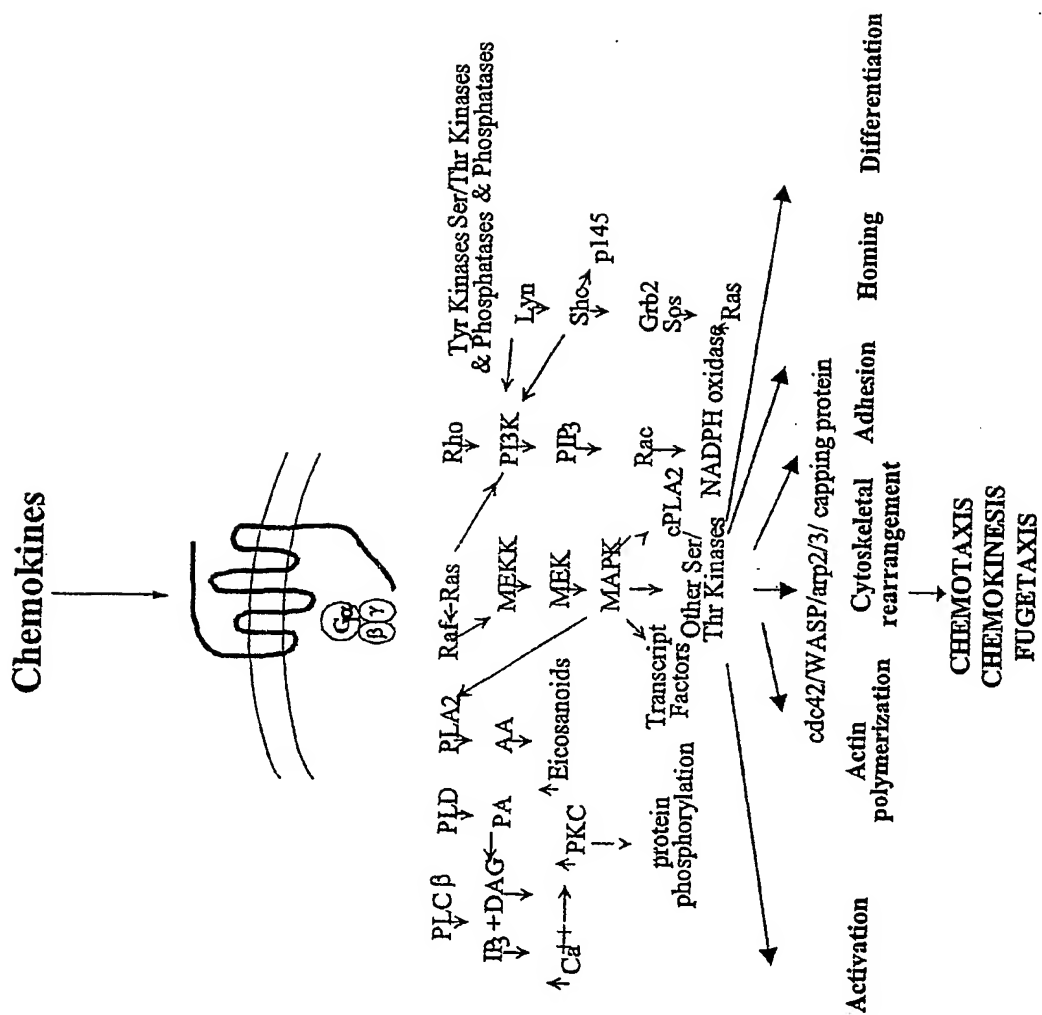


FIGURE 2A

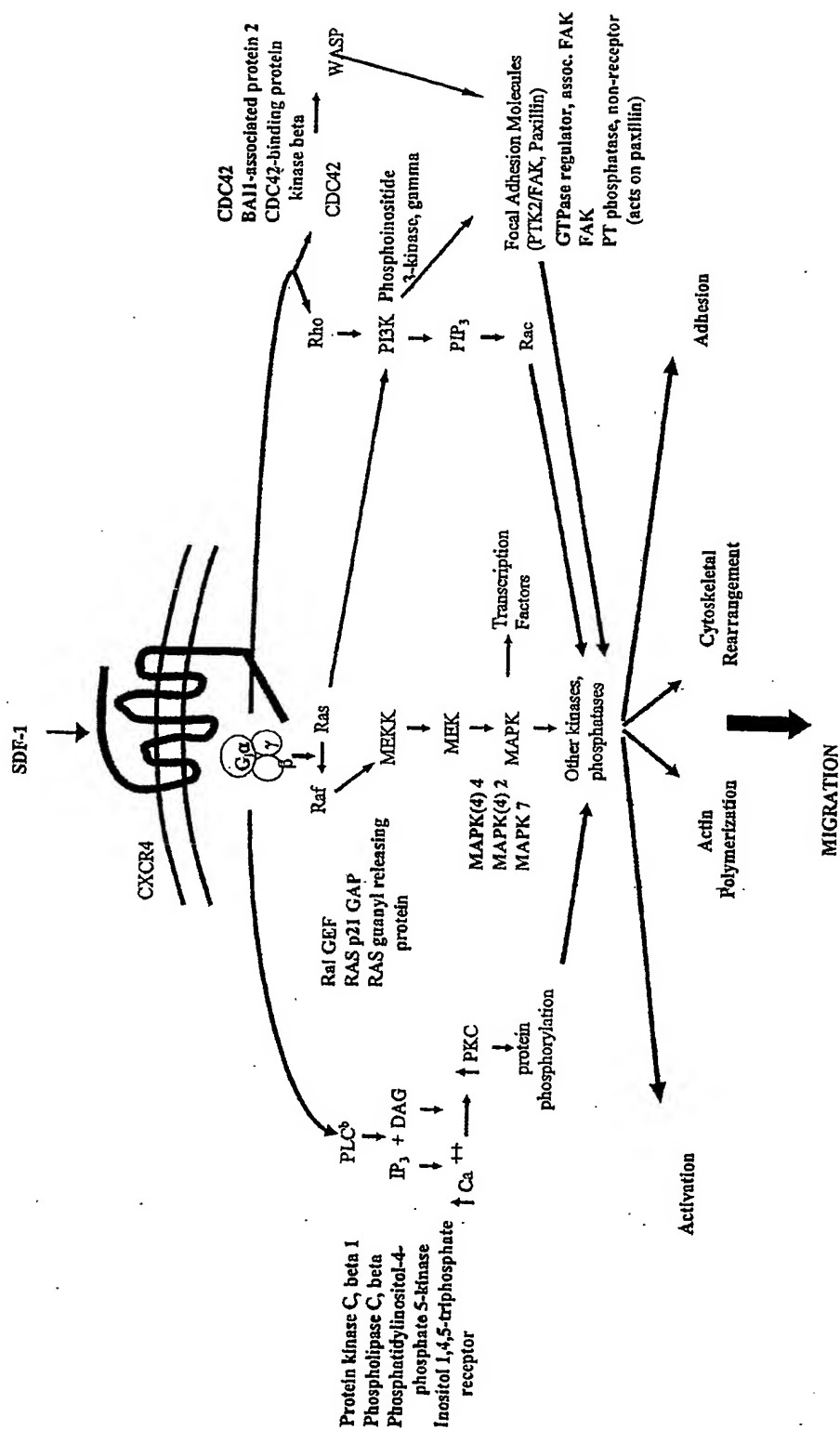


FIGURE 2B

FIGURE 3

Table 1
Differential Gene Expression in Chemokinesis vs Medium SDF-1 Gradients

UP REGULATED IN CHEMOKINESIS COMPARED TO MEDIUM SDF-1 GRADIENTS	
8.54	Hs.223014 antizyme inhibitor
6.88	Hs.740 PTK2 protein tyrosine kinase 2
6.62	Hs.6891 splicing factor, arginineserine-rich 6
5.45	Hs.73172 growth factor independent 1
5.38	Hs.73931 major histocompatibility complex, class II, DQ beta 1
4.97	Hs.18895 tousel-like kinase 1
4.89	Hs.76536 transducin (beta)-like 1
3.95	Hs.158688 KIAA0741 gene product
3.89	Hs.82985 collagen, type V, alpha 2
3.73	Hs.7358 hypothetical protein FLJ13110
3.70	Hs.75231 solute carrier family 16 (monocarboxylic acid transporters), member 1
3.67	Hs.236646 homeo box D9
3.64	Hs.9701 growth arrest and DNA-damage-inducible, gamma
3.63	Hs.73793 vascular endothelial growth factor
3.62	gb:BC006233.1 /DEF=Homo sapiens, ketohexokinase (fructokinase), clone MGC:10370, mRNA, complete cds.
3.52	Hs.171814 parathyromin
3.45	Hs.2969 v-ski avian sarcoma viral oncogene homolog
3.39	Hs.321223 keratin 6B
3.33	Hs.139648 KIAA0706 gene product
3.32	Hs.66309 Homo sapiens, Similar to RIKEN cDNA 2310034L04 gene, clone MGC:11061, mRNA, complete cds
3.22	Hs.54505 aquaporin 6, kidney specific
3.13	Hs.84285 ubiquitin-conjugating enzyme E2I (homologous to yeast UBC9)
3.06	Hs.135826 chymase 1, mast cell
3.00	Hs.249216 H2B histone family, member J
3.00	Hs.288650 aquaporin 4
2.95	Hs.82085 serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1
2.93	Hs.287763 Human DNA sequence from clone RP1-23O21 on chromosome 6. Contains acidic calponin 3 (CNN3) pseudogene
2.92	Hs.322680 Homo sapiens cDNA: FLJ21547 fis, clone COL06206
2.91	Hs.301667 Homo sapiens mRNA; cDNA DKFZp5661043 (from clone DKFZp5661043)
2.90	gb:BC006114.1 /DEF=Homo sapiens, Similar to cholinergic receptor, nicotinic, alpha polypeptide 3, clone MGC:12991, mRNA
2.88	Hs.173594 serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1
2.85	Hs.162200 urotensin 2
2.84	Hs.24385 Human hbc647 mRNA sequence
2.80	Hs.280380 aminopeptidase
2.75	Hs.25732 eukaryotic translation initiation factor 4 gamma, 3
2.70	Hs.79876 steroid sulfatase (microsomal), arylsulfatase C, isozyme S
2.66	Hs.306243 Homo sapiens thioredoxin delta 3 (TXN delta 3) mRNA, partial cds
2.64	Hs.2388 apolipoprotein F
2.63	Hs.292787 ESTs
2.62	Hs.34114 ATPase, Na+K+ transporting, alpha 2 (+) polypeptide
2.62	Hs.82065 interleukin 6 signal transducer (gp130, oncostatin M receptor)
2.62	Hs.271926 serologically defined colon cancer antigen.16
2.60	Hs.15791 transmembrane 7 superfamily member 1 (upregulated in kidney)
2.60	Hs.136075 Homo sapiens cDNA: FLJ23438 fis, clone HRC13275
2.55	Hs.121068 transmembrane 4 superfamily member 6
2.54	Hs.182740 ribosomal protein S11
2.53	Hs.82280 regulator of G-protein signalling 10
2.52	Hs.239114 mannosidase, alpha, class 1A, member 2
2.52	Hs.302022 PR domain containing 16
2.51	Hs.110903 claudin 5 (transmembrane protein deleted in velocardiofacial syndrome)

FIGURE 3

Table 1
Differential Gene Expression in Chemokinesis vs Medium SDF-1 Gradients

2.50	Hs.3005 transcription factor AP-4 (activating enhancer-binding protein 4)
2.50	Hs.293334 ESTs
2.49	Hs.66578 corticotropin releasing hormone receptor 2
2.46	Hs.286233 sperm autoantigenic protein 17
2.38	Hs.99971 zinc finger protein 272
2.34	Hs.24322 ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) 9kD
2.34	Hs.154762 HIV-1 rev binding protein 2
2.32	Hs.84152 cystathionine-beta-synthase
2.31	Hs.96 phorbol-12-myristate-13-acetate-induced protein 1
2.31	Hs.247043 type 1 tumor necrosis factor receptor shedding aminopeptidase regulator
2.30	Hs.55481 zinc finger protein 165
2.29	Hs.8074 brain-specific angiogenesis inhibitor 3
2.29	Hs.103978 serine/threonine kinase 22B (spermiogenesis associated)
2.27	Hs.306618 Homo sapiens cDNA FLJ11930 fis, clone HEMBB1000441
2.26	Hs.194669 enhancer of zeste (Drosophila) homolog 1
2.26	Hs.16488 calreticulin
2.25	Hs.305979 Homo sapiens clone FLB3024 PRO0756 mRNA, complete cds
2.25	Hs.79170 KIAA0227 protein
2.23	Hs.306602 Homo sapiens cDNA FLJ11514 fis, clone HEMBA1002229
2.22	Hs.223241 eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)
2.21	Hs.79042 neuromedin B receptor
2.19	Hs.93304 phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)
2.19	Hs.247741 protocadherin alpha 2
2.19	Hs.16488 calreticulin
2.18	Hs.129928 KIAA0477 gene product
2.17	Hs.54481 low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
2.17	Hs.133130 Homo sapiens mRNA; cDNA DKFZp566H0124 (from clone DKFZp566H0124)
2.17	Hs.306778 Homo sapiens cDNA: FLJ21524 fis, clone COL05921
2.16	Hs.239176 insulin-like growth factor 1 receptor
2.13	Hs.53973 vasoactive intestinal peptide
2.13	Hs.262869 plasminogen-like
2.12	Hs.86958 Interferon (alpha, beta and omega) receptor 2
2.09	Hs.86368 calmagin
2.07	Hs.169488 dentatorubral-pallidoluysian atrophy (atrophin-1)
2.07	Hs.21838 hypothetical protein FLJ11191
2.07	Hs.28777 H2A histone family, member L
2.05	Hs.199538 inhibin, beta C
2.05	Hs.272529 glycosylphosphatidylinositol specific phospholipase D1
2.05	Hs.248989 ESTs
2.04	Hs.39328 /len=463
2.04	Hs.287809 Human HOX-2.5 gene for homeodomain protein, partial
2.02	Hs.64639 glioma pathogenesis-related protein
2.02	Hs.274402 heat shock 70kD protein 1B
2.01	Hs.56145 thymosin, beta, identified in neuroblastoma cells
2.00	Hs.151841 glycoprotein A repetitions predominant
2.00	Hs.69547 myelin basic protein
1.97	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
1.94	Hs.5327 PRO1914 protein
1.93	Hs.85302 adenosine deaminase, RNA-specific, B1 (homolog of rat RED1)
1.92	Hs.118786 metallothionein 2A
1.92	Hs.278572 anaplastic lymphoma kinase (Ki-1)
1.91	Hs.315463 suppression of tumorigenicity 18 (melanoma differentiation)
1.91	Hs.159526 patched (Drosophila) homolog

FIGURE 3

Table 1
Differential Gene Expression in Chemokinesis vs Medium SDF-1 Gradients

1.91	Hs.24322 ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) 9kD
1.90	Hs.25732 eukaryotic translation initiation factor 4 gamma, 3
1.90	Hs.288771 DKFZP586A0522 protein
1.89	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
1.89	Hs.42244 Homo sapiens mRNA; cDNA DKFZp564A023 (from clone DKFZp564A023)
1.89	Hs.82101 pleckstrin homology-like domain, family A, member 1
1.89	Hs.279582 GTP-binding protein Sara
1.84	Hs.306639 Homo sapiens cDNA FLJ12624 fis, clone NT2RM4001754
1.83	Hs.55075 KIAA0410 gene product
1.83	Hs.142023 T cell activation, increased late expression
1.83	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
1.82	Hs.64639 glioma pathogenesis-related protein
1.80	Hs.48778 niban protein
1.79	Hs.36927 heat shock 105kD
1.79	Hs.4147 translocating chain-associating membrane protein
1.78	Hs.75574 mitochondrial ribosomal protein L19
1.78	Hs.135202 c-myc promoter-binding protein
1.78	Hs.298014 Homo sapiens cDNA FLJ14136 fis, clone MAMMA1002744
1.78	Hs.198267 mucin 4, tracheobronchial
1.78	Hs.113009 hypothetical protein FLJ22527
1.77	Hs.78064 ribosomal protein L27a
1.76	Hs.8786 carbohydrate (chondroitin 6keratan) sulfotransferase 2
1.76	Hs.75825 pleiomorphic adenoma gene-like 1
1.74	Hs.75825 pleiomorphic adenoma gene-like 1
1.72	Hs.26613 Homo sapiens mRNA; cDNA DKFZp586F1323 (from clone DKFZp586F1323)
1.71	Hs.3886 karyopherin alpha 3 (importin alpha 4)

FIGURE 3

Table 1
Differential Gene Expression in Chemokinesis vs Medium SDF-1 Gradients

DOWN REGULATED IN CHEMOKINESIS COMPARED TO MEDIUM SDF-1 GRADIENTS	
-8.38	Hs.12142 WD repeat domain 13
-8.19	Hs.279623 selenoprotein X, 1
-6.29	Hs.160577 granulin
-6.24	Hs.41 carcinoembryonic antigen-related cell adhesion molecule 8
-6.08	Hs.99863 elastase 2, neutrophil
-5.87	Hs.99960 membrane-spanning 4-domains, subfamily A, member 3 (hematopoietic cell-specific)
-5.22	Hs.286124 CD24 antigen (small cell lung carcinoma cluster 4 antigen)
-5.14	Hs.29417 HCF-binding transcription factor Zhangfei
-4.87	Hs.25817 BTB (POZ) domain containing 2
-4.87	Hs.193716 complement component (3b4b) receptor 1, including Knops blood group system
-4.75	Hs.10306 natural killer cell group 7 sequence
-4.56	Hs.26319 KIAA0833 protein
-4.54	Hs.300772 tropomyosin 2 (beta)
-4.49	Hs.457 fucosyltransferase 7 (alpha (1,3) fucosyltransferase)
-4.40	Hs.79340 PTH-responsive osteosarcoma B1 protein
-4.36	Hs.198037 KIAA0599 protein
-4.22	Hs.104555 neuropeptide FF-amide peptide precursor
-4.21	Hs.76930 synuclein, alpha (non A4 component of amyloid precursor)
-4.21	Hs.286124 CD24 antigen (small cell lung carcinoma cluster 4 antigen)
-4.07	Hs.234642 aquaporin 3
-3.88	Hs.89535 bactericidal/permeability-increasing protein
-3.88	Hs.88411 lymphocyte antigen 117
-3.84	Hs.58362 hypothetical protein FLJ12681
-3.81	Hs.154567 supervillin
-3.72	Hs.73839 ribonuclease, RNase A family, 3 (eosinophil cationic protein)
-3.72	Hs.272108 ESTs
-3.69	CD24 antigen (small cell lung carcinoma cluster 4 antigen)
-3.65	Hs.75498 small inducible cytokine subfamily A (Cys-Cys), member 20
-3.65	Hs.168454 ESTs
-3.63	Hs.76289 biliverdin reductase B (flavin reductase (NADPH))
-3.33	Hs.150917 catenin (cadherin-associated protein), alpha 2
-3.30	Hs.296941 H factor (complement)-like 2
-3.20	Hs.26994 hypothetical protein FLJ20477
-3.19	Hs.318885 superoxide dismutase 2, mitochondrial
-3.18	Hs.18889 DKFZP434M183 protein
-3.10	Hs.2962 S100 calcium-binding protein P
-3.05	Hs.181353 UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2
-3.03	Hs.286124 CD24 antigen (small cell lung carcinoma cluster 4 antigen)
-2.97	Hs.80741 propionyl Coenzyme A carboxylase, alpha polypeptide
-2.96	Hs.572 orosomucoid 1
-2.96	Hs.332045 Homo sapiens cDNA FLJ20181 fis, clone COL09252, highly similar to L33930 Homo sapiens CD24 signal transducer
-2.91	Hs.251754 secretory leukocyte protease inhibitor (antileukoprotease)
-2.87	Hs.30898 KIAA0634 protein
-2.84	Hs.2582 defensin, alpha 4, corticostatin
-2.76	Hs.1174 cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)
-2.76	Hs.8109 hypothetical protein FLJ21080
-2.73	Hs.7258 hypothetical protein FLJ22021
-2.71	aquaporin 3
-2.68	Hs.153934 core-binding factor, runt domain, alpha subunit 2; translocated to, 2
-2.66	Hs.193716 complement component (3b4b) receptor 1, including Knops blood group system

FIGURE 3

Table 1
Differential Gene Expression in Chemokinesis vs Medium SDF-1 Gradients

-2.59	Hs.814 major histocompatibility complex, class II, DP beta 1
-2.59	Hs.1619 achaete-scute complex (Drosophila) homolog-like 1
-2.58	Hs.100602 MAD (mothers against decapentaplegic, Drosophila) homolog 7
-2.56	Hs.189109 hypothetical protein FLJ21458
-2.55	Hs.328822 haptoglobin-related protein
-2.55	Hs.17752 phosphatidylserine-specific phospholipase A1alpha
-2.54	Hs.100623 phospholipase C, beta 3, neighbor pseudogene
-2.53	Hs.103382 phospholipid scramblase 3
-2.50	Hs.193122 Fc fragment of IgA, receptor for
-2.49	Hs.153952 5' nucleotidase (CD73)
-2.49	Hs.322422 Homo sapiens cDNA FLJ11676 fis, clone HEMBA1004752, highly similar to Homo sapiens mRNA for LAK-4p
-2.48	Hs.204238 lipocalin 2 (oncogene 24p3)
-2.45	gb:AF251061.1 /DEF=Homo sapiens neurocalcin mRNA, complete cds.
-2.45	Hs.192662 hypothetical protein FLJ10469
-2.44	Hs.241053 ESTs
-2.43	Hs.288300 hypothetical protein FLJ23231
-2.42	Hs.323884 nudix (nucleoside diphosphate linked moiety X)-type motif 6
-2.41	Hs.7531 KIAA0810 protein
-2.40	Hs.7252 KIAA1224 protein
-2.40	Hs.12229 TGFbeta inducible early growth response 2
-2.37	Hs.72964 makorin, ring finger protein, 3
-2.36	Hs.272205 hypothetical protein FLJ10034
-2.34	Hs.10082 potassium intermediate/small conductance calcium-activated channel, subfamily N, member 4
-2.32	Hs.300711 annexin A5
-2.32	Hs.914 Human mRNA for SB class II histocompatibility antigen alpha-chain
-2.31	Hs.278503 regulated in glioma
-2.30	Hs.75703 small inducible cytokine A4 (homologous to mouse Mip-1b)
-2.28	Hs.75811 N-acylsphingosine amidohydrolase (acid ceramidase)
-2.25	Hs.81256 S100 calcium-binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog)
-2.25	Hs.3086 granzyme K (serine protease, granzyme 3; tryptase II)
-2.24	Hs.71746 hypothetical protein FLJ11583
-2.23	Hs.155191 villin 2 (ezrin)
-2.23	Hs.159263 collagen, type VI, alpha 2
-2.23	Hs.21497 Homo sapiens, clone IMAGE:3629898, mRNA, partial cds
-2.22	Hs.9973 tensin
-2.20	Hs.119274 RAS p21 protein activator (GTPase activating protein) 3 (Ins(1,3,4,5)P4-binding protein)
-2.18	Hs.15984 pp21 homolog
-2.16	Hs.99491 RAS guanyl releasing protein 2 (calcium and DAG-regulated)
-2.16	Hs.17409 cysteine-rich protein 1 (intestinal)
-2.15	Hs.76297 G protein-coupled receptor kinase 6
-2.15	Hs.152981 CDP-diacylglycerol synthase (phosphatidate cytidyltransferase) 1
-2.14	Hs.957 putative opioid receptor, neuromedin K (neurokinin B) receptor-like
-2.14	Hs.168132 interleukin 15
-2.10	Hs.79021 tafazzin (cardiomyopathy, dilated 3A (X-linked); endocardial fibroelastosis 2; Barth syndrome)
-2.07	Hs.31659 thyroid hormone receptor-associated protein, 95-kD subunit
-2.05	Hs.167017 gamma-aminobutyric acid (GABA) B receptor, 1
-2.05	Hs.301289 Homo sapiens cDNA FLJ12427 fis, clone MAMMA1003127, highly similar to MYOSIN I ALPHA
-2.02	Hs.103147 hypothetical protein FLJ21347
-2.02	Hs.7188 hypothetical protein FLJ20369
-2.01	Hs.29656 cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)
-2.01	Hs.303289 Homo sapiens cDNA FLJ14096 fis, clone MAMMA1000752
-2.01	Hs.293699 hypothetical protein FLJ20495

FIGURE 3

Table 1
Differential Gene Expression in Chemokinesis vs Medium SDF-1 Gradients

-2.00	Hs.234789 breakpoint cluster region
-1.99	Hs.50868 solute carrier family 22 (organic cation transporter), member 1-like
-1.99	Hs.182982 golgin-67
-1.98	Hs.195464 filamin A, alpha (actin-binding protein-280)
-1.96	Hs.198252 G protein-coupled receptor 9
-1.96	Hs.56186 EGF-like-domain, multiple 3
-1.95	Hs.74034 Homo sapiens clone 24651 mRNA sequence
-1.95	Hs.11809 single Ig IL-1R-related molecule
-1.94	Hs.2551 adrenergic, beta-2-, receptor, surface
-1.93	Hs.154289 coagulation factor II (thrombin) receptor-like 1
-1.93	Hs.195464 filamin A, alpha (actin-binding protein-280)
-1.90	Hs.100071 6-phosphogluconolactonase
-1.89	Hs.79601 /len=613
-1.89	Hs.195464 filamin A, alpha (actin-binding protein-280)
-1.88	Hs.11809 /len=525
-1.87	Hs.94382 adenosine kinase
-1.87	Hs.134514 ATP-binding cassette, sub-family A (ABC1), member 7
-1.85	Hs.64310 interleukin 11 receptor, alpha
-1.83	Hs.78909 butyrate response factor 2 (EGF-response factor 2)
-1.81	PTH-responsive osteosarcoma B1 protein
-1.81	Hs.31290 Homo sapiens clone 23832 mRNA sequence
-1.81	Hs.30783 hypothetical protein FLJ20850
-1.81	Hs.9196 hypothetical protein
-1.80	Hs.332173 transducin-like enhancer of split 2, homolog of Drosophila E(sp1)
-1.79	Hs.4764 KIAA0763 gene product
-1.79	Hs.14770 bridging integrator 2
-1.79	Hs.178011 hypothetical protein FLJ20257
-1.79	Hs.13405 gephyrin
-1.78	gb:M18728.1 /DEF=Human nonspecific crossreading antigen mRNA, complete cds.
-1.77	Hs.76240 adenylate kinase 1
-1.75	Hs.79404 neuron-specific protein
-1.74	Hs.106061 RD RNA-binding protein
-1.74	Hs.8297 ribonuclease 6 precursor
-1.73	Hs.115907 diacylglycerol kinase, delta (130kD)
-1.73	Hs.40300 calpain 3, (p94)
-1.73	Hs.16193 Homo sapiens mRNA; cDNA DKFZp586B211 (from clone DKFZp586B211)
-1.73	Hs.321197 PDZ domain protein (Drosophila inaD-like)
-1.73	Hs.7212 hypothetical protein PP1044
-1.73	Hs.181780 hypothetical protein FLJ20241
-1.72	Hs.182982 golgin-67
-1.72	Hs.132807 Homo sapiens (clone 3.8-1) MHC class I mRNA fragment
-1.71	Hs.193163 bridging integrator 1
-1.71	Hs.115460 calicin
-1.71	Hs.193163 bridging integrator 1
-1.70	Hs.75450 delta sleep inducing peptide, immunoreactor
-1.70	Hs.1432 protein kinase C substrate 80K-H
-1.70	Hs.6150 Rho-specific guanine nucleotide exchange factor p114

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

UP REGULATED IN FUGETAXIS COMPARED TO CHEMOTAXIS SDF-1 GRADIENTS	
11.00	Hs.75184 chitinase 3-like 1 (cartilage glycoprotein-39)
8.12	Hs.79658 casein kinase 1, epsilon
6.17	Hs.7358 hypothetical protein FLJ13110
5.66	Hs.89535 bactericidal/permeability-increasing protein
5.61	Hs.100000 S100 calcium-binding protein A8 (calgranulin A)
5.57	Hs.182740 ribosomal protein S11
5.15	Hs.78913 chemokine (C-X3-C) receptor 1
5.07	Hs.81665 v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog
5.02	Hs.247989 Human immunoglobulin heavy chain variable region (V4-30.2) gene, partial cds
4.93	Hs.146409 cell division cycle 42 (GTP-binding protein, 25kD)
4.71	Hs.3076 MHC class II transactivator
4.70	gb:AF262973.1 /DEF=Homo sapiens killer cell immunoglobulin-like receptor 3DL1 (KIR3DL1) mRNA, KIR3DL1*00701 allele, complete cds.
4.57	gb:NM_000961.1 /DEF=Homo sapiens prostaglandin I2 (prostaglandin synthase (PTGIS), mRNA.
4.44	Hs.2962 S100 calcium-binding protein P
4.37	Hs.127384 DKFZP564C196 protein
4.34	Hs.108502 hypothetical protein FLJ20150
4.33	Hs.56328 killer cell immunoglobulin-like receptor, three domains, long cytoplasmic tail, 2
4.28	Hs.75137 KIAA0193 gene product
4.21	Hs.57975 calsequestrin 2 (cardiac muscle)
4.12	Hs.44579 hypothetical protein FLJ20199
4.08	Hs.326737 Homo sapiens, clone MGC:4655, mRNA, complete cds
3.99	Hs.13040 G protein-coupled receptor 86
3.98	Hs.75106 clusterin (complement lysis inhibitor, SP-40,40, sulfated glycoprotein 2, testosterone-repressed prostate message 2, apolipoprotein J)
3.96	Hs.75990 haptoglobin
3.91	Hs.6164 hypothetical protein FLJ10698
3.86	Hs.193783 Human DNA sequence from clone RP13-329D4 on chromosome 20 Contains ESTs, STSs, GSSs and a CpG island. Contains the 3 part of a novel gene, a gene similar to NCOR1 for a truncated form of nuclear receptor co-repressor 1 (retinoid X receptor inte
3.80	Hs.274272 hypothetical protein FLJ10232
3.78	Hs.111867 GLI-Kruppel family member GLI2
3.72	Hs.75105 emopamil-binding protein (sterol isomerase)
3.71	Hs.116651 epithelial V-like antigen 1
3.65	Hs.223014 antizyme inhibitor
3.64	Hs.180884 carboxypeptidase B1 (tissue)
3.64	Hs.314762 Homo sapiens partial IGKV gene for immunoglobulin kappa chain variable region, clone 30
3.62	Hs.80620 guanine nucleotide exchange factor for Rap1; M-Ras-regulated GEF
3.58	Hs.44278 hypothetical protein FLJ12538 similar to ras-related protein RAB17
3.57	Hs.29417 HCF-binding transcription factor Zhangfei
3.56	Hs.105859 hypothetical protein FLJ10260
3.55	Hs.154495 acetylcholinesterase (YT blood group)
3.54	Hs.287269 chorionic somatomammotropin hormone-like 1
3.51	Hs.2582 defensin, alpha 4, corticostatin
3.45	Hs.98658 budding uninhibited by benzimidazoles 1 (yeast homolog)
3.42	Hs.226014 Human DNA sequence from clone 240B8 on chromosome 6p11.2-q12. Contains the 3 part of a gene for a novel protein similar to T-STAR, Etolle, Sam68, SLM1 and p62 Tyrosine Phosphoprotein. Contains ESTs, STSs, GSSs and genomic marker D6S1695
3.42	Hs.33102 transcription factor AP-2 beta (activating enhancer-binding protein 2 beta)
3.34	Hs.18894 /len=982
3.29	Hs.287539 hypothetical protein FLJ12662
3.28	Hs.114316 sialyltransferase 8C (alpha2,3Galbeta1,4GlcNAcalpha 2,8-sialyltransferase)
3.27	Hs.323511 Homo sapiens cDNA: FLJ23176 fis, clone LNG10452
3.24	Hs.89839 EphA1
3.23	Hs.298469 angiotensin I converting enzyme (peptidyl-dipeptidase A) 1
3.18	Hs.314452 fibrousheathin II
3.17	Hs.85181 v-raf-1 murine leukemia viral oncogene homolog 1
3.16	Hs.273621 Homo sapiens cDNA: FLJ21350 fis, clone COL02751

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

3.11	Hs.88411 lymphocyte antigen 117
3.10	Hs.2056 UDP glycosyltransferase 1 family, polypeptide A9
3.10	Hs.233634 hypothetical protein FLJ14220
3.09	Hs.284277 Homo sapiens immunoglobulin mu chain antibody MO30 (IgM) mRNA, complete cds
3.09	gb:BC006196.1 /DEF=Homo sapiens, tumor necrosis factor receptor superfamily, member 9, clone MGC:2172, mRNA, complete cds.
3.07	Hs.97084 lymphocyte antigen 94 (mouse) homolog (activating NK-receptor ; NK-p46)
3.05	Hs.172740 microtubule-associated protein, RPEB family, member 3
3.00	Hs.73838 Homo sapiens (clone Z146) retinal mRNA, 3 end and repeat region
2.99	Hs.75294 corticotropin releasing hormone
2.99	Hs.949 neutrophil cytosolic factor 2 (65kD, chronic granulomatous disease, autosomal 2)
2.99	Hs.278984 calcium binding protein 2
2.99	Hs.73793 vascular endothelial growth factor
2.97	Hs.37169 potassium inwardly-rectifying channel, subfamily J, member 3
2.97	gb:NM_030876.1 /DEF=Homo sapiens olfactory receptor, family 5, subfamily V member 1 (OR5V1), mRNA.
2.96	Hs.88411 lymphocyte antigen 117
2.96	Hs.38586 hydroxy-delta-5-steroid dehydrogenase, 3 beta- and steroid delta-isomerase 1
2.95	Hs.65746 KIAA0318 protein
2.95	Hs.74076 CD163 antigen
2.91	Hs.40434 ribosomal protein S6 kinase, 90kD, polypeptide 6
2.90	Hs.137569 tumor protein 63 kDa with strong homology to p53
2.89	Hs.128749 alpha-methylacyl-CoA racemase
2.88	Hs.93758 H4 histone family, member H
2.84	Hs.7936 BAI1-associated protein 2
2.84	Hs.15165 novel retinal pigment epithelial gene
2.82	Hs.16488 calreticulin
2.81	Hs.79706 plectin 1, intermediate filament binding protein, 500kD
2.81	Hs.98485 gap junction protein, beta 3, 31kD (connexin 31)
2.80	Hs.246107 elongation of very long chain fatty acids (FEN1Elo2, SUR4Elo3, yeast)-like 2
2.80	Hs.287644 hypothetical protein FLJ20972
2.76	Hs.10755 dihydropyrimidinase
2.76	Hs.4 alcohol dehydrogenase 2 (class I), beta polypeptide
2.75	Hs.73839 ribonuclease, RNase A family, 3 (eosinophil cationic protein)
2.75	Hs.199250 chloride channel 4
2.73	Hs.198427 hexokinase 2
2.72	Hs.274127 CLST 11240 protein
2.71	Hs.70823 KIAA1077 protein
2.69	Hs.75260 mitogen inducible 2
2.68	Hs.302022 PR domain containing 16
2.67	Hs.821 lectin, galactoside-binding, soluble, 3 (galectin 3)
2.65	Hs.287872 hypothetical protein FLJ14108
2.65	Hs.123062 Human mRNA for T cell receptor, clone IGRA24
2.62	Hs.83484 SRY (sex determining region Y)-box 4
2.62	Hs.307138 Human DNA sequence from clone RP3-508D13 on chromosome 6 Contains a heat shock protein DNAJ pseudogene, ESTs, STSs and GSSs
2.62	Hs.151449 KIAA0535 gene product
2.60	Hs.1310 CD1B antigen, b polypeptide
2.59	Hs.6580 Homo sapiens cDNA: FLJ23227 fis, clone CAE00645, highly similar to AF052138 Homo sapiens clone 23718 mRNA sequence
2.59	gb:NM_030788.1 /DEF=Homo sapiens DC-specific transmembrane protein (LOC81501), mRNA.
2.59	Hs.132842 GTPase regulator associated with the focal adhesion kinase pp125(FAK); KIAA0821 protein
2.58	Hs.169401 apolipoprotein E
2.58	Hs.19520 FXYD domain-containing ion transport regulator 2
2.56	Hs.97403 KIAA0944 protein
2.52	Hs.181307 H3 histone, family 3A
2.51	Hs.119140 eukaryotic translation initiation factor 5A
2.49	Hs.307104 Human DNA sequence from clone RP11-278J20 on chromosome 6. Contains ESTs, STSs and GSSs. Contains an RBBP4 (retinoblastoma-binding protein 4) pseudogene and a KIAA0797 pseudogene
2.46	Hs.301916 Homo sapiens microtubule-associated protein 1A like protein (M1LP) mRNA, partial cds

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

2.45	Hs.79564 neuronal PAS domain protein 1
2.44	Hs.285529 G protein-coupled receptor 49
2.43	Hs.275215 hydroxysteroid (11-beta) dehydrogenase 1
2.41	Hs.128311 ESTs
2.40	Hs.37142 ephrin-A5
2.38	Hs.177972 chromosome 4 open reading frame 6
2.38	Hs.79516 brain abundant, membrane attached signal protein 1
2.36	Hs.152292 SWISNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1
2.36	Hs.97884 hypothetical protein FLJ22252 similar to SRY-box containing gene 17
2.35	gb:AB059408.1 /DEF=Homo sapiens mRNA, complete cds, clone:SMAP31-12.
2.34	Hs.88411 lymphocyte antigen 117
2.33	Hs.113274 transcription factor EC
2.32	Hs.166715 hypothetical protein PRO2533
2.29	Hs.73739 5-hydroxytryptamine (serotonin) receptor 7 (adenylate cyclase-coupled)
2.29	Hs.2718 human epididymis-specific 3 alpha
2.28	Hs.158316 ATP-binding cassette, sub-family B (MDRTAP), member 11
2.27	Hs.2012 transcobalamin I (vitamin B12 binding protein, R binder family)
2.26	Hs.301959 proline synthetase co-transcribed (bacterial homolog)
2.21	Hs.172153 glutathione peroxidase 3 (plasma)
2.20	Hs.183805 ankyrin 1, erythrocytic
2.18	Hs.284136 PRO2047 protein
2.18	Hs.181341 Homo sapiens cDNA FLJ14307 fis, clone PLACE3000158
2.17	Hs.232447 Homo sapiens DNA sequence from PAC 127D3 on chromosome 1q23-25. Contains FMO2 and FMO3 genes for Flavin-containing Monooxygenase 2 and Flavin-containing Monooxygenase 3 (Dimethylaniline Monooxygenase (N-Oxide 3, EC1.14.13.8, Dimethylaniline Oxi
2.16	Hs.77202 protein kinase C, beta 1
2.16	Hs.287673 hypothetical protein FLJ21625
2.16	Hs.76666 C9orf10 protein
2.16	Hs.150443 KIAA0320 protein
2.15	Hs.301946 lymphoid blast crisis oncogene
2.14	Hs.287427 Homo sapiens cDNA FLJ11578 fis, clone HEMBA1003571
2.13	Hs.107526 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5
2.12	Hs.54481 low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
2.12	Hs.268531 granzyme M (lymphocyte met-ase 1)
2.10	Hs.77886 lamin AC
2.10	Hs.176090 PRKC, apoptosis, WT1, regulator
2.10	Hs.306752 Homo sapiens cDNA: FLJ21391 fis, clone COL03479
2.10	Hs.210859 hypothetical protein FLJ11016
2.09	Hs.127614 protein phosphatase 1, regulatory (inhibitor) subunit 3 (glycogen and sarcoplasmic reticulum binding subunit, skeletal muscle)
2.08	Hs.82422 capping protein (actin filament), gelsolin-like
2.08	Hs.32168 KIAA0442 protein
2.08	Hs.78305 RAB2, member RAS oncogene family
2.07	Hs.306667 Homo sapiens cDNA FLJ14076 fis, clone HEMBB1001925
2.07	Hs.326198 transcription factor 4
2.06	Hs.60708 calsequestrin 1 (fast-twitch, skeletal muscle)
2.06	Hs.1870 phenylalanine hydroxylase
2.05	Hs.217493 annexin A2
2.05	Hs.33084 solute carrier family 2 (facilitated glucose transporter), member 5
2.05	Hs.80758 aspartyl-tRNA synthetase
2.04	Hs.73291 hypothetical protein FLJ10881
2.03	Hs.270549 HZFw1 protein
2.00	Hs.5831 tissue inhibitor of metalloproteinase 1 (erythroid potentiating activity, collagenase inhibitor)
2.00	Hs.142023 T cell activation, increased late expression
2.00	Hs.272789 hypothetical protein FLJ20217
2.00	Hs.308711 Homo sapiens cDNA: FLJ21215 fis, clone COL00526
2.00	Hs.323409 Homo sapiens cDNA FLJ14113 fis, clone MAMMA1001715
1.99	Hs.41143 phosphoinositide-specific phospholipase C-beta 1
1.99	Hs.46752 nitric oxide synthase 1 (neuronal)

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

1.98	Hs.278950 protocadherin beta 1
1.97	Hs.13245 KIAA0455 gene product
1.97	Hs.14070 hypothetical protein FLJ14166
1.96	Hs.269926 Homo sapiens cDNA: FLJ21441 fis, clone COL04422
1.96	Hs.26776 neurotrophic tyrosine kinase, receptor, type 3
1.96	Hs.159003 transient receptor potential channel 6
1.96	Hs.74614 tight junction protein 1 (zona occludens 1)
1.95	Hs.272351 Human DNA sequence from clone RP4-746H2 on chromosome 20. Contains a pseudogene similar to prokaryotic RPS11 (30S ribosomal protein S11), ESTs, STSs and GSSs
1.94	Hs.5814 suppression of tumorigenicity 7
1.94	Hs.169824 killer cell lectin-like receptor subfamily B, member 1
1.94	Hs.283683 chromosome 8 open reading frame 4
1.94	Hs.326780 Homo sapiens clone KM35 immunoglobulin light chain variable region mRNA, partial cds
1.94	Hs.106185 rat guanine nucleotide dissociation stimulator
1.93	Hs.172471 potassium voltage-gated channel, shaker-related subfamily, beta member 1
1.93	Hs.6654 KIAA0657 protein
1.92	Hs.158343 Testis-specific PTP-BL-related protein on Y
1.92	Hs.35101 proline-rich Gla (G-carboxyglutamic acid) polypeptide 2
1.92	Hs.97109 ESTs
1.92	Hs.106552 cell recognition molecule Caspr2
1.91	Hs.153445 Human mRNA for unknown product, partial cds
1.91	Hs.12079 calyculin-2
1.91	Hs.69547 myelin basic protein
1.90	Hs.129914 runt-related transcription factor 1 (acute myeloid leukemia 1; aml1 oncogene)
1.90	Hs.143212 cystatin F (leukocystatin)
1.90	Hs.90291 laminin, beta 2 (laminin S)
1.89	Hs.287719 hypothetical protein FLJ23074
1.88	Hs.91448 MKP-1 like protein tyrosine phosphatase
1.88	Hs.21858 trinucleotide repeat containing 3
1.88	Hs.77436 pleckstrin
1.88	Hs.295112 KIAA0618 gene product
1.87	Hs.76136 thioredoxin
1.87	Hs.247877 Human DNA sequence from clone 263J7 on chromosome 6q14.3-15. Contains an RPL7 (60S Ribosomal Protein L7) pseudogene, a RAB1 (RAB1, member RAS oncogene family) pseudogene, ESTs, an STS and GSSs
1.87	Hs.7358 hypothetical protein FLJ13110
1.86	Hs.128322 t-complex 11 (a murine tcp homolog)
1.86	Hs.226019 Homo sapiens mRNA for G16 protein (G16 gene located in the class III region of the major histocompatibility complex)
1.86	Hs.183805 ankyrin 1, erythrocytic
1.86	Hs.326401 fibroblast growth factor 12B
1.85	Hs.73729 very low density lipoprotein receptor
1.85	Hs.211578 MAD (mothers against decapentaplegic, Drosophila) homolog 3
1.85	Hs.158344 testis-specific testis transcript Y 1
1.84	Hs.114765 myeloidlymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 2
1.84	Hs.123138 leucine rich repeat and death domain containing protein
1.84	Hs.307185 Human glycophorin HeP2 mRNA, partial cds
1.84	Hs.81892 KIAA0101 gene product
1.83	Hs.160483 erythrocyte membrane protein band 7.2 (stomatrin)
1.83	Hs.82962 thymidylate synthetase
1.83	Hs.119285 len=716
1.82	Hs.149255 phosphatidylinositol-4-phosphate 5-kinase, type I, alpha
1.82	Hs.169910 KIAA0173 gene product
1.82	Hs.75825 pleiomorphic adenoma gene-like 1
1.82	Hs.89474 ADP-ribosylation factor 6
1.81	Hs.272398 transcription factor ets
1.81	Hs.296756 Homo sapiens cDNA FLJ14348 fis, clone THYR01001602
1.81	Hs.274578 Homo sapiens mRNA; cDNA DKFZp434F0723 (from clone DKFZp434F0723)
1.80	Hs.198281 pyruvate kinase, muscle

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

1.80	Hs.158345 testis-specific testis transcript Y 2
1.80	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
1.80	Hs.10247 activated leucocyte cell adhesion molecule
1.80	Hs.132781 class I cytokine receptor
1.80	Hs.54481 low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
1.79	Hs.48778 niban protein
1.79	Hs.9329 chromosome 20 open reading frame 1
1.79	Hs.272798 hypothetical protein FLJ20413
1.79	Hs.100194 arachidonate 5-lipoxygenase-activating protein
1.78	Hs.270010 KIAA0508 protein
1.78	Hs.8088 a disintegrin and metalloproteinase domain 11
1.78	Hs.183075 ATPase, Ca++ transporting, cardiac muscle, fast twitch 1
1.78	Hs.272375 WNT18 protein
1.78	Hs.288983 hypothetical protein FLJ21477
1.78	Hs.92254 hypothetical protein FLJ20163
1.78	Hs.306531 Homo sapiens caspase-10c mRNA, complete cds
1.78	Hs.76722 CCAATenhancer binding protein (CEBP), delta
1.77	Hs.76901 for protein disulfide isomerase-related
1.77	Hs.254105 enolase 1, (alpha)
1.77	Hs.311 phosphoribosyl pyrophosphate amidotransferase
1.77	Hs.31869 len=680
1.77	Hs.30299 IGF-II mRNA-binding protein 2
1.77	Hs.18705 KIAA1233 protein
1.77	Hs.121084 eppin-3
1.76	intersectin 1 (SH3 domain protein)
1.76	Hs.169081 ets variant gene 6 (TEL oncogene)
1.76	Hs.4975 potassium voltage-gated channel, KQT-like subfamily, member 2
1.76	Hs.170076 variable charge, Y chromosome
1.75	Hs.135305 olfactory receptor, family 10, subfamily H, member 3
1.75	Hs.287388 histamine H4 receptor
1.75	Hs.165 glucagon-like peptide 1 receptor
1.74	Hs.306235 hypothetical protein FLJ13954
1.73	Hs.102865 Interleukin 1 receptor-like 2
1.73	Hs.49500 KIAA0746 protein
1.73	Hs.56175 H.sapiens gene from PAC 106H8, similar to Dynamin
1.73	Hs.224829 ESTs
1.73	Hs.287445 hypothetical protein FLJ11726
1.72	Hs.287608 hypothetical protein FLJ13892
1.72	Hs.3628 mitogen-activated protein kinase kinase kinase 4
1.72	Hs.97174 potassium inwardly-rectifying channel, subfamily K, member 4
1.72	Hs.283330 hypothetical protein PRO1843
1.72	Hs.274509 T cell receptor gamma constant 2
1.71	Hs.105115 absent in melanoma 2
1.71	Hs.121576 Homo sapiens cDNA FLJ20153 fis, clone COL08656, highly similar to AJ001381 Homo sapiens incomplete cDNA for a mutated allele
1.71	Hs.183556 solute carrier family 1 (neutral amino acid transporter), member 5
1.71	Hs.79732 fibulin 1
1.71	Hs.62954 ferritin, heavy polypeptide 1
1.70	Hs.88474 prostaglandin-endoperoxide synthase 1 (prostaglandin GH synthase and cyclooxygenase)
1.70	Hs.112259 T cell receptor gamma locus
1.70	Hs.11 cardioembryonic antigen-related cell adhesion molecule 3

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

UP REGULATED IN CHEMOTAXIS COMPARED TO FUGETAXIS SDF-1 GRADIENTS	
-21.01	Hs.323342 actin related protein 23 complex, subunit 4 (20 kD)
-14.05	Hs.78409 collagen, type XVIII, alpha 1
-10.49	Hs.15075 hypothetical protein DKFZp434E2216
-10.32	Hs.305960 hemoglobin, gamma A
-10.19	Hs.85762 uncharacterized hematopoietic stemprogenitor cells protein MDS026
-9.17	Hs.76415 inter-alpha (globulin) inhibitor H4 (plasma Kallikrein-sensitive glycoprotein)
-8.59	Hs.740 PTK2 protein tyrosine kinase 2
-7.79	Hs.29222 zinc finger protein 76 (expressed in testis)
-7.50	Hs.73931 major histocompatibility complex, class II, DQ beta 1
-7.30	Hs.82979 mitogen-activating protein kinase kinase kinase 2
-6.96	Hs.46907 HEMK homolog 7kb
-6.76	Hs.289031 hypothetical protein FLJ11848
-6.59	Hs.79410 solute carrier family 4, anion exchanger, member 2 (erythrocyte membrane protein band 3-like 1)
-6.29	Hs.109441 hypothetical protein FLJ20707
-6.02	Hs.14142 nudix (nucleoside diphosphate linked moiety X)-type motif 2
-5.92	Hs.110457 Wolf-Hirschhorn syndrome candidate 1
-5.76	Hs.247981 Stat2 type a
-5.62	Hs.301636 peroxisomal biogenesis factor 6
-5.43	Hs.283404 organic cation transporter
-5.30	Hs.300496 mitochondrial solute carrier
-5.28	Hs.79019 baculoviral IAP repeat-containing 1
-5.28	Hs.6343 KIAA1464 protein
-5.27	Hs.121073 hypothetical protein FLJ10466
-5.25	Hs.280666 Homo sapiens chromosome 19, cosmid R32184
-5.25	Hs.79340 PTH-responsive osteosarcoma B1 protein
-5.12	Hs.279862 cdk inhibitor p21 binding protein
-5.07	gb:NM_030882.1 /DEF=Homo sapiens apolipoprotein L 2 (APOL2), mRNA.
-4.97	Hs.76289 biliverdin reductase B (flavin reductase (NADPH))
-4.96	Hs.36972 CD7 antigen (p41)
-4.95	Hs.21970 guanine nucleotide binding protein (G protein), gamma 3, linked
-4.82	Hs.197335 plasma glutamate carboxypeptidase
-4.73	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-4.67	Hs.250821 hypothetical protein MGC4054
-4.65	Hs.93597 cyclin-dependent kinase 5, regulatory subunit 1 (p35)
-4.63	Hs.22370 Homo sapiens mRNA; cDNA DKFZp564O0122 (from clone DKFZp564O0122)
-4.51	Hs.1516 insulin-like growth factor-binding protein 4
-4.49	Hs.74047 electron-transfer-flavoprotein, beta polypeptide
-4.48	Hs.22479 KIAA1110 protein
-4.46	Hs.296821 Human facioscapulohumeral muscular dystrophy (FSHD) gene region, D4Z4 tandem repeat unit
-4.46	Hs.20017 chromosome 22 open reading frame 4
-4.45	Hs.325530 KIAA1067 protein
-4.44	Hs.26938 Homo sapiens, clone IMAGE:4053044, mRNA, partial cds
-4.37	Hs.23585 KIAA1078 protein
-4.36	Hs.264 GS2 gene
-4.32	Hs.99987 excision repair cross-complementing rodent repair deficiency, complementation group 2 (xeroderma pigmentosum D)
-4.30	Hs.7943 RPB5-mediating protein
-4.26	Hs.27810 retinoic acid- and interferon-inducible protein (58kD)
-4.24	Hs.278483 H4 histone family, member E
-4.20	Hs.26045 protein tyrosine phosphatase, receptor type, A
-4.16	Hs.155924 cAMP responsive element modulator
-4.13	Hs.54558 hypothetical protein FLJ22222
-4.04	Hs.7946 KIAA1288 protein
-4.04	Hs.29285 ZYG homolog
-4.01	Hs.112751 KIAA0892 protein
-3.96	Hs.7019 signal-induced proliferation-associated gene 1

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

-3.95	Hs.80598 transcription elongation factor A (SII), 2
-3.93	Hs.315478 Homo sapiens, Similar to pericentriolar material 1, clone MGC:8458, mRNA, complete cds
-3.93	Hs.272814 hypothetical protein DKFZp434E1723
-3.92	Hs.277401 bromodomain adjacent to zinc finger domain, 2A
-3.92	Hs.287652 Homo sapiens cDNA: FLJ21258 fis, clone COL01408
-3.88	Hs.41693 DnaJ (Hsp40) homolog, subfamily B, member 4
-3.86	Hs.19554 chromosome 1 open reading frame 2
-3.84	Hs.112434 Novel human gene mapping to chromosome 13
-3.80	Hs.4854 cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
-3.77	Hs.182577 inositol polyphosphate-5-phosphatase, 75kD
-3.77	Hs.181223 hypothetical protein PRO2801
-3.77	Hs.256549 nucleotide binding protein 2 (E.coli MinD like)
-3.73	gb:U41742.1 /DEF=Human nucleophosmin-retinoic acid receptor alpha fusion protein NPM-RAR long form mRNA, complete cds.
-3.65	thyroid hormone receptor, alpha (avian erythroblastic leukemia viral (v-erb-a) oncogene homolog)
-3.64	Hs.30260 v-maf musculoaponeurotic fibrosarcoma (avian) oncogene homolog
-3.64	Hs.44865 lymphoid enhancer binding factor-1
-3.63	Hs.40300 calpain 3, (p94)
-3.63	gb:Z25432.1 /DEF=H.sapiens protein-serine/threonine kinase gene, complete CDS.
-3.62	Hs.90443 NADH dehydrogenase (ubiquinone) Fe-S protein 8 (23kD) (NADH-coenzyme Q reductase)
-3.62	Hs.121102 vanin 2
-3.61	Hs.126707 hypothetical protein FLJ11457
-3.61	Hs.306677 Homo sapiens cDNA FLJ14320 fis, clone PLACE3000455
-3.61	Hs.33862 ESTs
-3.59	Hs.139648 KIAA0706 gene product
-3.59	Hs.89560 Iduronidase, alpha-L-
-3.57	Hs.7426 KIAA0841 protein
-3.56	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-3.56	Hs.14286 flavin containing monooxygenase 5
-3.56	Hs.319088 hypothetical protein FLJ10375
-3.55	Hs.138155 carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 7
-3.55	Hs.129943 KIAA0545 protein
-3.53	Hs.89232 chromobox homolog 5 (Drosophila HP1 alpha)
-3.50	Hs.142245 HERV-H LTR-associating 3
-3.49	Hs.26899 KIAA0285 gene product
-3.49	Hs.77313 cyclin-dependent kinase (CDC2-like) 10
-3.47	Hs.78146 platelet/endothelial cell adhesion molecule (CD31 antigen)
-3.47	Hs.194148 v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1
-3.44	Hs.21361 KIAA1023 protein
-3.43	Hs.227280 U6 snRNA-associated Sm-like protein
-3.42	Hs.9846 KIAA1040 protein
-3.41	Hs.73742 ribosomal protein, large, P0
-3.40	Hs.226581 COX15 (yeast) homolog, cytochrome c oxidase assembly protein
-3.35	Hs.1975 hypothetical protein FLJ21007
-3.33	Hs.100090 tetraspan 3
-3.29	Hs.195484 Homo sapiens mRNA full length insert cDNA clone EUROIMAGE 327506
-3.29	Hs.85195 myeloid leukemia factor 1
-3.27	Hs.155470 zinc finger protein 38 (KOX 25)
-3.27	Hs.6831 golgi resident protein GCP60
-3.25	Hs.87908 Snf2-related CBP activator protein
-3.23	Hs.12908 CDC42-binding protein kinase beta (DMPK-like)
-3.22	Hs.210546 interleukin 21 receptor
-3.20	Hs.46821 hypothetical protein FLJ20086
-3.16	Hs.211933 collagen, type XIII, alpha 1
-3.16	Hs.36977 hemoglobin, delta
-3.15	Hs.291972 ESTs, Moderately similar to SC14_HUMAN SEC14-LIKE PROTEIN H.sapiens
-3.14	Hs.190616 ESTs
-3.14	Hs.12142 WD repeat domain 13

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

-3.13	Hs.249216 H2B histone family, member J
-3.13	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-3.13	Hs.288697 hypothetical protein MGC11349
-3.12	Hs.48269 vaccinia related kinase 1
-3.11	Hs.267263 hypothetical protein
-3.11	Hs.81505 KIAA0579 protein
-3.09	Hs.9857 carbonyl reductase
-3.07	Hs.184938 Novel human gene mapping to chromosome 13
-3.06	Hs.36972 CD7 antigen (p41)
-3.04	Hs.6179 DEADH (Asp-Glu-Ala-AspHis) box polypeptide 17 (72kD)
-3.03	Hs.248007 Human beta-cytoplasmic actin (ACTBP9) pseudogene
-3.03	Hs.194637 BANP homolog, SMAR1 homolog
-2.99	Hs.61712 pyruvate dehydrogenase kinase, isoenzyme 1
-2.98	Hs.26471 Homo sapiens clone HQ0692
-2.98	Hs.292998 ESTs
-2.97	Hs.107164 spectrin, beta, non-erythrocytic 1
-2.97	Hs.94392 LDL induced EC protein
-2.95	Hs.278503 regulated in glioma
-2.95	Hs.168625 androgen-induced prostate proliferative shutoff associated protein
-2.93	Hs.81424 ubiquitin-like 1 (sentrin)
-2.91	Hs.104916 hypothetical protein FLJ21940
-2.90	Hs.99918 carboxyl ester lipase (bile salt-stimulated lipase)
-2.90	Hs.83347 angio-associated, migratory cell protein
-2.89	Hs.86178 M-phase phosphoprotein 9
-2.84	Hs.251410 Homo sapiens chromosome 19, cosmid R31180
-2.84	Hs.278741 UDP glycosyltransferase 1 family, polypeptide A8
-2.82	Hs.288617 hypothetical protein FLJ22621
-2.82	Hs.2558 bone gamma-carboxyglutamate (gla) protein (osteocalcin)
-2.81	Hs.170307 Ral guanine nucleotide exchange factor RalGPS1A
-2.81	Hs.241558 ariadne (Drosophila) homolog 2
-2.80	Hs.272317 Homo sapiens mRNA; cDNA DKFZp434O0213 (from clone DKFZp434O0213); partial cds
-2.80	Hs.293334 ESTs
-2.78	Hs.3080 mitogen-activated protein kinase 7
-2.78	Hs.94037 hypothetical protein FLJ23053
-2.78	KIAA0280 protein
-2.77	Hs.12328 KIAA1005 protein
-2.76	Hs.237825 signal recognition particle 72kD
-2.76	Hs.272792 hypothetical protein FLJ20307
-2.73	Hs.132753 F-box only protein 2
-2.71	Hs.74519 primase, polypeptide 2A (58kD)
-2.71	Hs.180338 tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein)
-2.68	Hs.285005 mitochondrial import receptor Tom22
-2.68	Hs.172052 serine/threonine kinase 18
-2.68	Hs.180903 hypothetical protein 384D8_6
-2.67	Hs.9071 progesterone membrane binding protein
-2.64	Hs.18443 aldehyde dehydrogenase 8 family, member A1
-2.63	Hs.174185 ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin)
-2.62	Hs.17883 protein phosphatase 1G (formerly 2C), magnesium-dependent, gamma isoform
-2.62	Hs.170482 myosin, light polypeptide 5, regulatory
-2.61	Hs.180338 tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein)
-2.61	Hs.153293 KIAA0701 protein
-2.60	Hs.238272 inositol 1,4,5-trisphosphate receptor, type 2
-2.59	Hs.58362 hypothetical protein FLJ12681
-2.59	Homo sapiens chromosome 19, cosmid R28784, complete sequence.
-2.58	Hs.75813 polycystic kidney disease 1 (autosomal dominant)
-2.57	Hs.23964 sin3-associated polypeptide, 18kD

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

-2.54	Hs.283875 NPD009 protein
-2.54	Hs.183887 hypothetical protein FLJ22104
-2.53	Hs.80741 propionyl Coenzyme A carboxylase, alpha polypeptide
-2.52	Hs.80828 keratin 1 (epidermolytic hyperkeratosis)
-2.52	Hs.147587 Homo sapiens mRNA; cDNA DKFZp547F134 (from clone DKFZp547F134)
-2.52	Hs.287444 hypothetical protein FLJ11722
-2.51	Hs.17409 cysteine-rich protein 1 (intestinal)
-2.50	Hs.325520 Homo sapiens IMAA mRNA for hLAT1-3TM, complete cds
-2.49	Hs.301011 KIAA0878 protein
-2.48	Hs.16193 Homo sapiens mRNA; cDNA DKFZp586B211 (from clone DKFZp586B211)
-2.48	Hs.32942 phosphoinositide-3-kinase, catalytic, gamma polypeptide
-2.48	Hs.23240 Homo sapiens cDNA FLJ13496 fis, clone PLACE1004471, weakly similar to ZINC FINGER PROTEIN 83
-2.47	Hs.23798 odz (odd Ozten-m, Drosophila) homolog 1
-2.46	Hs.180338 tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein)
-2.46	Hs.175941 B-cell receptor-associated protein BAP29
-2.44	Hs.57856 PFTAIR protein kinase 1
-2.43	Hs.115537 putative dipeptidase
-2.43	Hs.155546 KIAA1080 protein; Golgi-associated, gamma-adaptin ear containing, ARF-binding protein 2
-2.40	Hs.20019 hemochromatosis
-2.40	Hs.207805 Homo sapiens mRNA; cDNA DKFZp564I066 (from clone DKFZp564I066)
-2.39	Hs.29725 hypothetical protein FLJ13197
-2.39	Hs.158654 KIAA1196 protein
-2.39	Hs.126779 KIAA0752 protein
-2.38	Hs.248572 hypothetical protein FLJ22965
-2.38	Hs.77152 minichromosome maintenance deficient (S. cerevisiae) 7
-2.37	Hs.91816 hypothetical protein
-2.35	Hs.95697 liver-specific bHLH-Zip transcription factor
-2.34	Hs.283978 Homo sapiens PRO2751 mRNA, complete cds
-2.34	Hs.306211 small EDRK-rich factor 1B (centromeric)
-2.33	Hs.6700 /len=604
-2.32	Hs.5022 Imprinted in Prader-Willi syndrome
-2.32	Hs.82919 cullin 2
-2.31	Hs.274131 Down syndrome critical region gene 1-like 2
-2.30	Hs.7594 solute carrier family 2 (facilitated glucose transporter), member 3
-2.29	gb:NM_030900.1 /DEF=Homo sapiens KIAA0948 protein (KIAA0948), mRNA.
-2.29	Hs.271699 polymerase (DNA directed) iota
-2.29	Hs.134729 FXYD domain-containing ion transport regulator 7
-2.28	Hs.180408 solute carrier family 25 (mitochondrial carrier; Graves disease autoantigen), member 16
-2.28	Hs.57553 tousled-like kinase 2
-2.28	Hs.82919 cullin 2
-2.27	Hs.34012 breast cancer 2, early onset
-2.24	Hs.202276 KIAA1009 protein
-2.23	Hs.89563 nuclear cap binding protein subunit 1, 80kD
-2.22	Hs.966 collin
-2.22	Hs.25155 neuroepithelial cell transforming gene 1
-2.21	Hs.108779 DKFZP586E1519 protein
-2.21	Hs.79440 IGF-II mRNA-binding protein 3
-2.20	Hs.46465 T-cell, immune regulator 1
-2.20	Hs.74861 activated RNA polymerase II transcription cofactor 4
-2.19	Hs.238944 hypothetical protein FLJ10631
-2.19	Hs.279902 cofactor required for Sp1 transcriptional activation, subunit 9 (33kD)
-2.19	Hs.79372 retinoid X receptor, beta
-2.19	Hs.183291 zinc finger protein 268
-2.19	Hs.247817 H2B histone family, member A
-2.18	Hs.274336 camitine palmitoyltransferase II
-2.18	Hs.283709 lipopolysaccharide specific response-7 protein

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

-2.18	Hs.6541 ATPase, Ca++ transporting, ubiquitous
-2.17	Hs.8173 hypothetical protein FLJ10803
-2.16	Hs.16079 hypothetical protein FLJ10233
-2.14	Hs.180338 tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein)
-2.13	Hs.82129 carbonic anhydrase III, muscle specific
-2.13	Hs.143131 glycoprotein A33 (transmembrane)
-2.13	Hs.111244 hypothetical protein
-2.12	Hs.168640 ankylosis, progressive (mouse) homolog
-2.11	Hs.283485 ESTs, Weakly similar to ALU1_HUMAN ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-2.11	Hs.5897 hypothetical protein FLJ13078
-2.11	Hs.7995 len=469
-2.10	Hs.519 WW domain-containing oxidoreductase
-2.10	Hs.2815 POU domain, class 6, transcription factor 1
-2.09	Hs.278985 hypothetical protein
-2.09	Hs.89474 ADP-ribosylation factor 6
-2.08	Hs.301114 zinc finger protein 79 (pT7)
-2.08	Hs.235445 hypothetical protein FLJ21313
-2.07	Hs.139033 paternally expressed 3
-2.07	Hs.62187 phosphatidylinositol glycan, class K
-2.06	Hs.109655 sex comb on midleg (Drosophila)-like 1
-2.06	Hs.279777 hypothetical protein
-2.06	Hs.75694 mannose phosphate isomerase
-2.05	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-2.05	Hs.66180 nucleosome assembly protein 1-like 2
-2.05	Hs.306292 Homo sapiens mRNA; cDNA DKFZp564F133 (from clone DKFZp564F133)
-2.04	Hs.42215 protein phosphatase 1, regulatory subunit 6
-2.04	Hs.75574 mitochondrial ribosomal protein L19
-2.04	Hs.301512 nuclear mitotic apparatus protein 1
-2.04	Hs.58593 general transcription factor IIF, polypeptide 2 (30kD subunit)
-2.04	Hs.16193 Homo sapiens mRNA; cDNA DKFZp586B211 (from clone DKFZp586B211)
-2.03	Hs.283753 cell cycle progression 8 protein
-2.03	Hs.226103 Homo sapiens mRNA; cDNA DKFZp564G222 (from clone DKFZp564G222)
-2.03	Hs.100932 transcription factor 17
-2.03	Hs.278398 KIAA1117 protein
-2.03	Hs.39733 postsynaptic protein CRIPT
-2.03	Hs.200595 KIAA0562 gene product
-2.03	Hs.31659 thyroid hormone receptor-associated protein, 95-kD subunit
-2.03	Hs.98571 complement C1r-like proteinase precursor,
-2.02	Hs.179507 KIAA0779 protein
-2.02	Hs.71168 Homo sapiens clone 24674 mRNA sequence
-2.02	Hs.82143 E74-like factor 2 (ets domain transcription factor)
-2.02	Hs.62 protein tyrosine phosphatase, non-receptor type 12
-2.02	Hs.236642 3-hydroxyisobutyryl-Coenzyme A hydrolase
-2.02	Hs.9456 SWISNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5
-2.01	Hs.182595 dynein, axonemal, light polypeptide 4
-2.01	Hs.294014 ESTs
-2.01	Hs.920 modulator recognition factor I
-2.00	Hs.108947 KIAA0050 gene product
-2.00	Hs.111373 KIAA0423 protein
-2.00	Hs.158205 basic leucine zipper nuclear factor 1 (JEM-1)
-2.00	Hs.79078 MAD2 (mitotic arrest deficient, yeast, homolog)-like 1
-2.00	Hs.13421 KIAA0058 protein
-2.00	Hs.155995 KIAA0643 protein
-1.99	Hs.323950 zinc finger protein 6 (CMPX1)
-1.99	Hs.103834 hypothetical protein MGC5576
-1.99	Hs.300741 sorcin

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

-1.99	gb:NM_030794.1 /DEF=Homo sapiens hypothetical protein FLJ21007 (FLJ21007), mRNA.
-1.99	Hs.27413 adaptor protein containing pH domain, PTB domain and leucine zipper motif
-1.98	Hs.152151 plakophilin 4
-1.98	Hs.300684 calcitonin gene-related peptide-receptor component protein
-1.98	Hs.307091 Homo sapiens ARTS protein (PNUTL2) mRNA, complete cds; nuclear gene for mitochondrial product
-1.98	Hs.119274 RAS p21 protein activator (GTPase activating protein) 3 (Ins(1,3,4,6)P4-binding protein)
-1.98	Hs.139271 phosphodiesterase 5A, cGMP-specific
-1.98	Hs.99491 RAS guanyl releasing protein 2 (calcium and DAG-regulated)
-1.97	Hs.79388 epithelial membrane protein 1
-1.97	Hs.7827 CGI-60 protein
-1.97	Hs.265581 CD2-associated protein
-1.97	Hs.58362 /len=594
-1.97	Hs.192966 KIAA0265 protein
-1.96	Hs.288411 ESTs
-1.96	Hs.3530 TLS-associated serine-arginine protein 2
-1.95	gb:AF019888.1 /DEF=Homo sapiens Arp23 complex 20 kDa subunit (ARC20) mRNA, complete cds.
-1.95	Hs.285848 KIAA1454 protein
-1.95	Hs.105633 hypothetical protein FLJ10583
-1.95	Hs.279781 HSPC134 protein
-1.94	Hs.6217 Homo sapiens cDNA FLJ12521 fis, clone NT2RM2001840
-1.94	Hs.50335 cytochrome P450 monooxygenase
-1.92	Hs.279842 HSPC157 protein
-1.92	Hs.84560 hypothetical protein FLJ11795
-1.92	Hs.283978 Homo sapiens PRO2751 mRNA, complete cds
-1.91	Hs.25245 hypothetical protein FLJ11269
-1.91	Hs.21497 Homo sapiens, clone IMAGE:3829896, mRNA, partial cds
-1.90	Hs.178011 hypothetical protein FLJ20257
-1.90	Hs.22549 hypothetical protein FLJ12799
-1.89	Hs.3945 CGI-107 protein
-1.89	Hs.280666 Homo sapiens chromosome 19, cosmid R32184
-1.88	Hs.7158 DKFZP566H073 protein
-1.88	Hs.100729 KIAA0692 protein
-1.88	Hs.153489 ASB-1 protein
-1.88	Hs.121128 BCR downstream signaling 1
-1.88	Hs.75887 coatamer protein complex, subunit alpha
-1.87	Hs.301997 hypothetical protein FLJ13033
-1.87	Hs.71746 hypothetical protein FLJ11583
-1.87	Hs.7194 CGI-74 protein
-1.86	Human clone 23719 mRNA sequence
-1.86	Hs.234898 /len=382
-1.86	Hs.190488 hypothetical protein FLJ10120
-1.86	Hs.164036 Homo sapiens AKAP350C mRNA sequence, alternatively spliced
-1.85	Hs.79018 chromatin assembly factor 1, subunit A (p150)
-1.85	Hs.9629 papillary renal cell carcinoma (translocation-associated)
-1.85	Hs.156687 KIAA1536 protein
-1.85	Hs.87 retinoblastoma-like 1 (p107)
-1.84	Hs.100602 MAD (mothers against decapentaplegic, Drosophila) homolog 7
-1.84	Hs.6113 staufer (Drosophila, RNA-binding protein)
-1.84	Hs.8124 PH domain containing protein in retina 1
-1.83	Hs.287391 Homo sapiens chromosome 19, cosmid F23269
-1.82	Hs.166204 PHD finger protein 1
-1.82	Hs.193163 bridging integrator 1
-1.81	Hs.48291 phosphodiesterase 6D, cGMP-specific, rod, delta
-1.81	Hs.75546 capping protein (actin filament) muscle Z-line, alpha 2
-1.81	Hs.68398 period (Drosophila) homolog 1
-1.81	Hs.29956 KIAA0460 protein
-1.80	Hs.82684 ETAA16 protein

FIGURE 4

Table 2
Differential Gene Expression in Fugetaxis vs Chemotaxis SDF-1 Gradients

-1.80	Hs.153498 chromosome 18 open reading frame 1
-1.80	Hs.52463 KIAA0966 protein
-1.80	Hs.153636 far upstream element (FUSE) binding protein 3
-1.80	Hs.2780 jun D proto-oncogene
-1.79	Hs.7432 hypothetical protein FLJ10477
-1.79	Hs.24284 ADP-ribosyltransferase (NAD ⁺ ; poly (ADP-ribose) polymerase)-like 2
-1.78	Hs.44131 KIAA0974 protein
-1.78	Hs.288986 survival of motor neuron 1, telomeric
-1.78	Hs.283609 hypothetical protein PRO2032
-1.78	Hs.1602 dihydropyrimidine dehydrogenase
-1.77	Hs.52891 hypothetical protein PRO1853
-1.77	Hs.326528 phosphodiesterase 3B, cGMP-inhibited
-1.77	Hs.210546 interleukin 21 receptor
-1.77	Hs.100914 hypothetical protein FLJ10352
-1.76	Hs.47099 hypothetical protein FLJ21212
-1.76	Hs.84429 KIAA0971 protein
-1.76	Hs.118194 RNA lariat debranching enzyme
-1.76	Hs.279785 putative secreted protein
-1.76	Hs.46903 hypothetical protein FLJ12838
-1.76	Hs.278857 heterogeneous nuclear ribonucleoprotein H2 (H)
-1.75	Hs.83636 adrenergic, beta, receptor kinase 1
-1.75	Hs.236642 3-hydroxyisobutyryl-Coenzyme A hydrolase
-1.75	Hs.19904 cystathionase (cystathionine gamma-lyase)
-1.74	Hs.106843 /len=765
-1.74	Hs.13225 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 4
-1.74	Hs.151461 embryonic ectoderm development
-1.74	Hs.203772 FSHD region gene 1
-1.74	Hs.8198 zinc finger protein 204
-1.73	Hs.102456 survival of motor neuron protein interacting protein 1
-1.73	Hs.295923 seven in absentia (Drosophila) homolog 1
-1.73	Hs.16951 DKFZP586P2219 protein
-1.73	Hs.9196 hypothetical protein
-1.73	Hs.322645 Homo sapiens mRNA; cDNA DKFZp586J101 (from clone DKFZp586J101)
-1.73	Hs.239934 CGI-98 protein
-1.72	Hs.22559 KIAA0197 protein
-1.72	Hs.112493 Homo sapiens mRNA; cDNA DKFZp564D036 (from clone DKFZp564D036)
-1.72	Hs.26102 trichorhinophalangeal syndrome I
-1.72	Hs.252723 ribosomal protein L19
-1.72	Hs.244 amino-terminal enhancer of split
-1.72	Hs.279819 APR-1 protein
-1.71	Hs.295446 ESTs, Moderately similar to 810024C cytochrome oxidase I H.sapiens
-1.71	Hs.30696 transcription factor-like 5 (basic helix-loop-helix)
-1.71	Hs.31834 Homo sapiens clone 25129 mRNA sequence
-1.71	Hs.14928 hypothetical protein FLJ12903
-1.71	Hs.236940 /len=570
-1.71	Hs.48433 endocrine regulator
-1.71	Hs.283912 Homo sapiens PAC clone RP4-771P4 from 7q11.21-q11.23
-1.71	Hs.129445 hypothetical protein FLJ12496
-1.70	Hs.49526 f-box and leucine-rich repeat protein 4
-1.70	Hs.70359 KIAA0136 protein
-1.70	Hs.75790 phosphatidylinositol glycan, class C
-1.70	Hs.83790 KIAA0305 gene product
-1.70	Hs.18885 CGI-116 protein
-1.70	Hs.232068 transcription factor 8 (represses interleukin 2 expression)

FIGURE 5

Table 3
Differential Gene Expression in Chemokinesis vs Chemotaxis SDF-1 Gradients

UP REGULATED IN CHEMOTAXIS COMPARED TO CHEMOKINESIS SDF-1 GRADIENTS	
80.37	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
51.46	Hs.80358 SMC (mouse) homolog, Y chromosome
36.38	Hs.180911 ribosomal protein S4, Y-linked
24.62	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
21.08	Hs.193145 ubiquitin specific protease 9, Y chromosome (Drosophila fat facets related)
16.17	Hs.155397 Homo sapiens mRNA; cDNA DKFZp564K143 (from clone DKFZp564K143)
12.68	Hs.177605 killer cell lectin-like receptor subfamily C, member 2
11.67	Hs.75658 phosphorylase, glycogen; brain
10.31	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
9.31	Hs.301636 peroxisomal biogenesis factor 6
9.28	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
8.95	FK506-binding protein 8 (38kD)
8.15	Hs.37427 erythrocyte membrane protein band 4.1 (elliptocytosis 1, RH-linked)
7.92	Hs.278599 nuclear receptor subfamily 6, group A, member 1
6.60	Hs.25817 BTB (POZ) domain containing 2
6.45	Hs.79410 solute carrier family 4, anion exchanger, member 2 (erythrocyte membrane protein band 3-like 1)
6.13	Hs.56336 protein kinase, Y-linked
6.10	Hs.5541 ATPase, Ca++ transporting, ubiquitous
6.04	Hs.180577 granulin
5.26	Hs.73931 major histocompatibility complex, class II, DQ beta 1
5.01	Hs.10306 natural killer cell group 7 sequence
4.63	Hs.272108 ESTs
4.28	Hs.121073 hypothetical protein FLJ10466
4.27	Hs.79340 PTH-responsive osteosarcoma B1 protein
4.19	Hs.89560 iduronidase, alpha-L-
3.91	Hs.272438 discs, large (Drosophila) homolog 3 (neuroendocrine-dlg)
3.90	Hs.104555 neuropeptide FF-amide peptide precursor
3.79	Hs.285753 SCG10-like-protein
3.75	Hs.99877 Janus kinase 3 (a protein tyrosine kinase, leukocyte)
3.56	Hs.187378 hypothetical protein FLJ11278
3.54	Hs.58362 hypothetical protein FLJ12681
3.40	Hs.98614 ribosome binding protein 1 (dog 180kD homolog)
3.38	Hs.12142 WD repeat domain 13
3.35	Hs.202672 endothelial differentiation, sphingolipid G-protein-coupled receptor, 5
3.35	Hs.41 carcinoembryonic antigen-related cell adhesion molecule 8
3.31	Hs.76416 Inter-alpha (globulin) inhibitor H4 (plasma kallikrein-sensitive glycoprotein)
3.21	Hs.326035 early growth response 1
3.18	Hs.193324 ESTs
3.17	Hs.279651 melanoma inhibitory activity
3.13	Hs.194662 calponin 3, acidic
3.13	Hs.167380 BLU protein
3.10	Hs.181353 UDP-Gal-beta-GlcNAc beta 1,3-galactosyltransferase, polypeptide 2
3.10	Hs.110964 hypothetical protein FLJ23471
3.10	Hs.147472 dynein intermediate chain 2
3.09	Hs.7724 KIAA0963 protein
3.03	gb:U52696.1 /DEF=Human adrenal Creb-rp homolog (Creb-rp), complete cds, and tenascin-X (XB), partial cds, mRNA.
3.02	Hs.134729 FXYD domain-containing ion transport regulator 7
2.99	Hs.17409 cysteine-rich protein 1 (intestinal)
2.95	Hs.3066 granzyme K (serine protease, granzyme 3; tryptase II)
2.90	Hs.92381 nudix (nucleoside diphosphate linked moiety X)-type motif 4
2.90	Hs.242407 G protein-coupled receptor, family C, group 5, member B
2.86	Hs.76289 biliverdin reductase B (flavin reductase (NADPH))
2.84	Hs.7258 hypothetical protein FLJ22021
2.84	gb:NM_030931.1 /DEF=Homo sapiens epididymal secretory protein ESP13.2 (ESP13.2), mRNA.
2.82	Hs.233789 ESTs
2.81	Hs.64096 KIAA0427 gene product

FIGURE 5

Table 3
Differential Gene Expression in Chemokinesis vs Chemotaxis SDF-1 Gradients

2.78	Hs.328822 haptoglobin-related protein
2.76	Hs.247950 H.sapiens mRNA for Ig light chain, variable region (ID:CLL001VL)
2.75	Hs.248 mitogen-activated protein kinase kinase 8
2.75	Hs.272891 hippocadin-like protein 4
2.74	Hs.72964 makorin, ring finger protein, 3
2.65	Hs.234642 aquaporin 3
2.64	Hs.85112 insulin-like growth factor 1 (somatomedin C)
2.60	Hs.306425 Homo sapiens mRNA for KIAA1417 protein, partial cds
2.60	Hs.321149 hypothetical protein FLJ10257
2.55	Hs.306412 Homo sapiens cDNA FLJ20854 fis, clone ADKA01341
2.54	Hs.278932 PRO0214 protein
2.51	Hs.192662 hypothetical protein FLJ10469
2.49	Hs.283675 NPD009 protein
2.48	Hs.12229 TGFB inducible early growth response 2
2.47	Hs.160318 FXD domain-containing ion transport regulator 1 (phospholemman)
2.47	Hs.300711 annexin A5
2.46	Hs.171825 basic helix-loop-helix domain containing, class B, 2
2.44	Hs.112434 Novel human gene mapping to chromosome 13
2.43	Hs.81182 histamine N-methyltransferase
2.43	Hs.144630 nuclear receptor subfamily 2, group F, member 1
2.41	Hs.66718 RAD54 (S.cerevisiae)-like
2.41	Hs.211388 Homo sapiens BAC clone CTB-60N22 from 7q21
2.40	Hs.260870 mitogen-activated protein kinase kinase 5
2.35	Hs.24083 KIAA0997 protein
2.34	Hs.30250 v-maf musculoaponeurotic fibrosarcoma (avian) oncogene homolog
2.33	Hs.78995 MADS box transcription enhancer factor 2, polypeptide C (myocyte enhancer factor 2C)
2.32	Hs.83169 matrix metalloproteinase 1 (interstitial collagenase)
2.32	Hs.36972 CD7 antigen (p41)
2.30	Hs.7627 CGI-60 protein
2.30	Hs.61258 argininosuccinate lyase
2.29	Hs.184915 zinc finger protein, Y-linked
2.27	Hs.105700 secreted frizzled-related protein 4
2.24	Hs.8688 leukocyte membrane antigen
2.22	Hs.6881 ELL gene (11-19 lysine-rich leukemia gene)
2.19	Human DNA sequence from clone RP5-1174N9 on chromosome 1p34.1-35.3. Contains the gene for a novel protein with IBR domain, a (pseudo)
2.18	Hs.94970 KIAA0306 protein
2.18	Hs.322422 Homo sapiens cDNA FLJ11676 fis, clone HEMBA1004752, highly similar to Homo sapiens mRNA for LAK-4p
2.17	Hs.195464 filamin A, alpha (actin-binding protein-280)
2.16	gb:NM_030753.1 /DEF=Homo sapiens wingless-type MMTV integration site family, member 3 (WNT3), mRNA.
2.15	Hs.195432 aldehyde dehydrogenase 2 family (mitochondrial)
2.15	Hs.1724 interleukin 2 receptor, alpha
2.14	Hs.21497 Homo sapiens, clone IMAGE:3629896, mRNA, partial cds
2.09	Hs.38972 CD7 antigen (p41)
2.08	Hs.11590 cathepsin F
2.08	Hs.57749 synaptic nuclei expressed gene 2; KIAA1011 protein
2.07	Hs.103382 phospholipid scramblase 3
2.06	Hs.77858 mesenchyme homeo box 2 (growth arrest-specific homeo box)
2.06	Hs.64239 Human DNA sequence from clone RP5-1174N9 on chromosome 1p34.1-35.3. Contains the gene for a novel protein with IBR domain, a (pseudo)
2.06	Hs.211584 neurofilament, light polypeptide (68kD)
2.05	Hs.278285 cholinergic receptor, nicotinic, epsilon polypeptide
2.05	Hs.11809 single Ig IL-1R-related molecule
2.04	Hs.3838 serum-inducible kinase
2.03	aquaporin 3
2.02	Hs.307091 Homo sapiens ARTS protein (PNUTL2) mRNA, complete cds; nuclear gene for mitochondrial product
1.99	Hs.71746 hypothetical protein FLJ11583

FIGURE 5

Table 3
Differential Gene Expression in Chemokinesis vs Chemotaxis SDF-1 Gradients

1.98	Hs.58362 /len=594
1.97	Hs.195464 filamin A, alpha (actin-binding protein-280)
1.96	Hs.81256 S100 calcium-binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog)
1.96	Hs.79019 baculoviral IAP repeat-containing 1
1.95	Hs.78781 vascular endothelial growth factor B
1.94	Hs.7019 signal-induced proliferation-associated gene 1
1.94	Hs.68877 cytochrome b-245, alpha polypeptide
1.94	Hs.195464 filamin A, alpha (actin-binding protein-280)
1.92	Hs.1103 transforming growth factor, beta 1
1.92	Hs.150540 Homo sapiens, clone IMAGE:3954961, mRNA, partial cds
1.90	Hs.155191 villin 2 (ezrin)
1.90	Hs.301417 AHNK nucleoprotein (desmoyokin)
1.90	Hs.112049 SET binding factor 1
1.88	Hs.73956 NAD(P)H menadione oxidoreductase 2, dioxin-Inducible
1.88	Hs.202687 potassium voltage-gated channel, Shal-related subfamily, member 2
1.88	Hs.5345 arginyl aminopeptidase (aminopeptidase B)-like 1
1.88	Hs.30127 hypothetical protein
1.86	Hs.7252 KIAA1224 protein
1.85	Hs.76240 adenylate kinase 1
1.85	Hs.25999 hypothetical protein FLJ22195
1.84	Hs.118463 transport-secretion protein 2.2,
1.84	Hs.153529 Homo sapiens clone 24540 mRNA sequence
1.82	Hs.9999 epithelial membrane protein 3
1.82	Hs.167017 gamma-aminobutyric acid (GABA) B receptor, 1
1.82	Hs.51305 v-maf musculoaponeurotic fibrosarcoma (avian) oncogene family, protein F
1.82	Hs.272972 hypothetical protein FLJ20185
1.81	peroxisomal biogenesis factor 6
1.81	Hs.103147 hypothetical protein FLJ21347
1.80	Hs.74573 similar to vaccinia virus HindIII K4L ORF
1.80	Hs.62402 p21Cdc42Rac1-activated kinase 1 (yeast Ste20-related)
1.80	Hs.112028 MisshapenNIK-related kinase
1.79	Hs.428 fms-related tyrosine kinase 3 ligand
1.78	Hs.100071 6-phosphogluconolactonase
1.77	Hs.99491 RAS guanyl releasing protein 2 (calcium and DAG-regulated)
1.76	Hs.182982 golgin-67
1.76	Hs.31659 thyroid hormone receptor-associated protein, 95-kD subunit
1.76	Hs.275438 histone deacetylase 7A
1.74	Hs.2651 adrenergic, beta-2-, receptor, surface
1.74	Hs.91299 guanine nucleotide binding protein (G protein), beta polypeptide 2
1.73	Hs.11809 /len=525
1.73	Hs.9731 nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, beta
1.73	Hs.195484 Homo sapiens mRNA full length insert cDNA clone EUROIMAGE 327506
1.73	Hs.180040 hypothetical protein FLJ22439
1.72	Hs.94382 adenosine kinase
1.72	Hs.156667 KIAA1536 protein
1.72	Hs.285313 core promoter element binding protein
1.72	Hs.47344 advillin
1.72	Hs.41502 hypothetical protein FLJ21276
1.71	Hs.7647 MYC-associated zinc finger protein (purine-binding transcription factor)
1.71	Hs.104481 Nck, Ash and phospholipase C binding protein
1.71	Hs.178011 hypothetical protein FLJ20257
1.70	Hs.131885 /len=582
1.70	Hs.108947 KIAA0050 gene product
1.70	Hs.272814 hypothetical protein DKFZp434E1723

FIGURE 5

Table 3
Differential Gene Expression in Chemokinesis vs Chemotaxis SDF-1 Gradients

DOWN REGULATED IN CHEMOTAXIS COMPARED TO CHEMOKINESIS SDF-1 GRADIENTS	
-17.85	Hs.223014 antizyme inhibitor
-12.91	Hs.76364 allograft inflammatory factor 1
-5.81	Hs.82985 collagen, type V, alpha 2
-5.69	Hs.7358 hypothetical protein FLJ13110
-5.42	Hs.212587 Homo sapiens mRNA; cDNA DKFZp566M043 (from clone DKFZp566M043)
-5.06	Hs.51120 cathelicidin antimicrobial peptide
-4.80	Hs.173464 FK506-binding protein 8 (38kD)
-4.69	Hs.134503 PR domain containing 8
-4.54	Hs.119500 ribosomal protein, large P2
-4.27	Hs.139263 calcium channel, voltage-dependent, alpha 1F subunit
-4.24	Hs.76845 phosphoserine phosphatase-like
-4.23	Hs.182740 ribosomal protein S11
-4.18	gb:M24668.1 /DEF=Human Ig rearranged H-chain V-region mRNA (C-D-JH4), complete cds.
-3.89	Hs.73793 vascular endothelial growth factor
-3.89	Hs.75105 emopamil-binding protein (sterol isomerase)
-3.86	Hs.274 megakaryocyte-associated tyrosine kinase
-3.86	Hs.24322 ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) 9kD
-3.78	Hs.203269 ESTs, Moderately similar to ALU8_HUMAN ALU SUBFAMILY SX SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-3.76	Hs.3112 sodium channel, nonvoltage-gated 1, gamma
-3.72	Hs.10247 activated leucocyte cell adhesion molecule
-3.67	Hs.406 solute carrier family 6 (neurotransmitter transporter, dopamine), member 3
-3.66	Hs.27184 growth factor, erv1 (S. cerevisiae)-like (augmenter of liver regeneration)
-3.63	Hs.321223 keratin 6B
-3.57	Hs.173594 serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member 1
-3.52	Hs.152251 frizzled (Drosophila) homolog 5
-3.50	Hs.69752 desmocollin 1
-3.48	Hs.159581 matrix metalloproteinase 17 (membrane-inserted)
-3.48	Hs.105927 stem cell growth factor, lymphocyte secreted C-type lectin
-3.47	Hs.223241 eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)
-3.40	Hs.24322 ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) 9kD
-3.36	Hs.239737 C-terminal binding protein 1
-3.33	Hs.78305 RAB2, member RAS oncogene family
-3.32	Hs.84285 ubiquitin-conjugating enzyme E2I (homologous to yeast UBC9)
-3.29	Hs.303649 small inducible cytokine A2 (monocyte chemotactic protein 1, homologous to mouse Sig-je)
-3.27	Hs.183362 hypothetical protein FLJ20535
-3.28	Hs.146409 cell division cycle 42 (GTP-binding protein, 25kD)
-3.22	Hs.2869 v-ski avian sarcoma viral oncogene homolog
-3.20	Hs.279832 hypothetical protein FLJ10488
-3.18	Hs.187354 nuclear receptor subfamily 2, group E, member 3
-3.18	Hs.68578 corticotropin releasing hormone receptor 2
-3.12	Hs.18280 cysteine-rich motor neuron 1
-3.12	Hs.154999 ESTs, Moderately similar to HERC2 H.sapiens
-3.11	Hs.273294 hypothetical protein FLJ20069
-3.10	Hs.139137 Homo sapiens clone 24442 mRNA sequence
-3.06	Hs.178749 synovial sarcoma, X breakpoint 3
-3.06	Hs.7645 fibrinogen, B beta polypeptide
-3.05	Hs.154085 leucine zipper protein 1
-3.04	Hs.188427 hexokinase 2
-3.03	Hs.302022 PR domain containing 16
-3.01	Hs.105859 hypothetical protein FLJ10260
-2.98	Hs.278581 fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome)
-2.98	Hs.278581 fibroblast growth factor receptor 2 (bacteria-expressed kinase, keratinocyte growth factor receptor, craniofacial dysostosis 1, Crouzon syndrome, Pfeiffer syndrome, Jackson-Weiss syndrome)
-2.98	Hs.4775 junctophilin 3

FIGURE 5

Table 3
Differential Gene Expression in Chemokinesis vs Chemotaxis SDF-1 Gradients

-2.95	Hs.82280 regulator of G-protein signalling 10
-2.95	Hs.225170 hypothetical protein FLJ11535
-2.92	Hs.125783 DEME-6 protein
-2.92	gb:BC006196.1 /DEF=Homo sapiens, tumor necrosis factor receptor superfamily, member 9, clone MGC:2172, mRNA, complete cds.
-2.92	Hs.16488 calreticulin
-2.92	Hs.292911 ESTs
-2.91	Hs.142907 Human BRCA2 region, mRNA sequence CG011
-2.89	Hs.306778 Homo sapiens cDNA: FLJ21524 fis, clone COL05921
-2.85	Hs.307345 Homo sapiens putative transcription factor (MTG8) mRNA, alternatively spliced, partial cds
-2.85	Hs.123062 Human mRNA for T cell receptor, clone IGRA24
-2.80	Hs.315463 suppression of tumorigenicity 16 (melanoma differentiation)
-2.78	Hs.109733 CGI-131 protein
-2.78	Hs.248190 UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylglucosaminyltransferase 4 (GalNAc-T4)
-2.74	Hs.41752 keratin, hair, acidic, 2
-2.73	Hs.1166 thrombopoietin (myeloproliferative leukemia virus oncogene ligand, megakaryocyte growth and development factor)
-2.72	Hs.159900 G protein-coupled receptor 15
-2.68	Hs.7936 BAI1-associated protein 2
-2.68	Hs.283330 hypothetical protein PRO1843
-2.67	Hs.57764 protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform
-2.64	Hs.115365 chromosome X open reading frame 2
-2.64	Hs.16488 calreticulin
-2.64	Hs.128311 ESTs
-2.64	Hs.283055 hypothetical protein PRO1316
-2.60	Hs.93758 H4 histone family, member H
-2.58	Hs.249727 hypothetical protein FLJ11798
-2.57	Hs.233568 H2A histone family, member I
-2.55	Hs.171995 kallikrein 3, (prostate specific antigen)
-2.55	Hs.85302 adenosine deaminase, RNA-specific, B1 (homolog of rat RED1)
-2.55	Hs.172928 collagen, type I, alpha 1
-2.54	Hs.702 cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 18
-2.53	Hs.3781 similar to murine leucine-rich repeat protein
-2.52	Hs.288650 aquaporin 4
-2.47	Hs.322680 Homo sapiens cDNA: FLJ21547 fis, clone COL08206
-2.43	Hs.69559 KIAA1096 protein
-2.42	Hs.108287 intercellular adhesion molecule 4, Landsteiner-Wiener blood group
-2.41	Hs.194766 H.sapiens GENX-5624 mRNA, 3 UTR
-2.41	Hs.213392 hypothetical protein FLJ13195 similar to stromal antigen 3
-2.41	Hs.166715 hypothetical protein PRO2533
-2.38	Hs.65149 growth hormone 2
-2.38	gb:BC005949.1 /DEF=Homo sapiens, similar to rat myomegalin, clone MGC:14586, mRNA, complete cds.
-2.38	Hs.306243 Homo sapiens thioredoxin delta 3 (TXN delta 3) mRNA, partial cds
-2.37	Hs.306602 Homo sapiens cDNA FLJ11514 fis, clone HEMBA1002229
-2.35	gb:NM_012465.1 /DEF=Homo sapiens toll-like 2 (TLL2), mRNA.
-2.32	Hs.41135 endomucin-2
-2.31	Hs.111732 Fc fragment of IgG binding protein
-2.31	Hs.73064 gonadotropin-releasing hormone receptor
-2.30	Hs.7306 secreted frizzled-related protein 1
-2.30	Hs.288931 Homo sapiens cDNA FLJ13034 fis, clone NT2RP3001232
-2.29	Hs.25732 eukaryotic translation initiation factor 4 gamma, 3
-2.29	gb:NM_030975.1 /DEF=Homo sapiens keratin associated protein 9.9 (KRTAP9.9), mRNA.
-2.27	Hs.20137 hypothetical protein DKFZp434P0116
-2.26	Hs.97109 ESTs
-2.23	Hs.111611 ribosomal protein L27
-2.20	Hs.78629 ATPase, Na+K+ transporting, beta 1 polypeptide
-2.19	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
-2.16	Hs.4147 translocating chain-associating membrane protein

FIGURE 5

Table 3
Differential Gene Expression in Chemokinesis vs Chemotaxis SDF-1 Gradients

-2.15	Hs.183805 ankyrin 1, erythrocytic
-2.15	Hs.14846 Homo sapiens mRNA; cDNA DKFZp564D016 (from clone DKFZp564D016)
-2.14	Hs.124126 Homo sapiens clone 24438 mRNA sequence
-2.13	Hs.199538 inhibin, beta C
-2.12	Hs.301946 lymphoid blast crisis oncogene
-2.11	Hs.28777 H2A histone family, member L
-2.09	Hs.75736 apolipoprotein D
-2.09	Hs.25051 plakophilin 2
-2.09	Hs.79170 KIAA0227 protein
-2.07	Hs.142023 T cell activation, increased late expression
-2.07	Hs.305979 Homo sapiens clone FLB3024 PRO0756 mRNA, complete cds
-2.06	Hs.279773 differentiation-related protein dif13
-2.05	Hs.2388 apolipoprotein F
-2.05	Hs.91971 cAMP-regulated guanine nucleotide exchange factor II
-2.05	Hs.3781 similar to murine leucine-rich repeat protein
-2.05	Hs.79474 tyrosine 3-monooxygenasetryptophan 5-monooxygenase activation protein, epsilon polypeptide
-2.05	Hs.133130 Homo sapiens mRNA; cDNA DKFZp566H0124 (from clone DKFZp566H0124)
-1.99	Hs.76064 ribosomal protein L27a
-1.98	Hs.75929 cadherin 11, type 2, OB-cadherin (osteoblast)
-1.97	Hs.48950 heptacellular carcinoma novel gene-3 protein
-1.96	Hs.142570 Homo sapiens clone 24629 mRNA sequence
-1.94	Hs.184245 KIAA0929 protein Mx2 interacting nuclear target (MINT) homolog
-1.94	Hs.127828 guanine nucleotide binding protein (G protein), gamma 7
-1.94	Hs.279903 Ras homolog enriched in brain 2
-1.94	Hs.42194 hypothetical protein FLJ22649 similar to signal peptidase SPC2223
-1.93	Hs.159003 transient receptor potential channel 6
-1.93	Hs.75871 protein kinase C binding protein 1
-1.92	Hs.75294 corticotropin releasing hormone
-1.92	Hs.262869 plasminogen-like
-1.90	Hs.239176 insulin-like growth factor 1 receptor
-1.90	Hs.16533 myosin phosphatase, target subunit 1
-1.89	Hs.129683 Homo sapiens unknown mRNA, sequence
-1.88	Hs.24385 Human hbc647 mRNA sequence
-1.87	Hs.165662 KIAA0675 gene product
-1.87	Hs.283037 HSPC039 protein
-1.86	Hs.152939 Homo sapiens clone 24630 mRNA sequence
-1.86	Hs.89474 ADP-ribosylation factor 6
-1.86	Hs.247904 Human DNA sequence from clone 1080K6 on chromosome 20p12.1-13 Contains a pseudogene similar to 40S ribosomal protein S11, ESTs, STSs and GSSs
-1.86	Hs.121128 BCR downstream signaling 1
-1.85	Hs.56043 CGI-115 protein
-1.84	Hs.184050 v-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog
-1.84	Hs.50716 hypothetical protein SIRP-b2
-1.83	Hs.133207 PTPRF interacting protein, binding protein 1 (liprin beta 1)
-1.82	Hs.7910 RING1 and YY1 binding protein
-1.81	Hs.25732 eukaryotic translation initiation factor 4 gamma, 3
-1.81	Hs.159526 patched (Drosophila) homolog
-1.81	Hs.92254 hypothetical protein FLJ20163
-1.80	Hs.56966 KIAA0906 protein
-1.80	Hs.283729 ESTs
-1.79	Hs.76884 inhibitor of DNA binding 3, dominant negative helix-loop-helix protein
-1.79	Hs.298014 Homo sapiens cDNA FLJ14136 fis, clone MAMMA1002744
-1.79	Hs.283683 chromosome 8 open reading frame 4
-1.78	Hs.115823 ribonuclease P, 40kD subunit
-1.78	Hs.292245 ESTs, Weakly similar to ALU1_HUMAN ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-1.77	Hs.17211 dedicator of cyto-kinesks 2
-1.76	Hs.69547 myelin basic protein

FIGURE 5

Table 3
Differential Gene Expression in Chemokinesis vs Chemotaxis SDF-1 Gradients

-1.76	Hs.223241 eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)
-1.76	Hs.150551 ESTs, Weakly similar to ALU1_HUMAN ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-1.76	Hs.73291 hypothetical protein FLJ10881
-1.75	Hs.274382 protein kinase, interferon-inducible double stranded RNA dependent
-1.75	Hs.79732 fibulin 1
-1.75	Hs.502 ATP-binding cassette, sub-family B (MDRTAP), member 3
-1.74	Hs.212587 Homo sapiens mRNA; cDNA DKFZp566M043 (from clone DKFZp566M043)
-1.72	Hs.86958 interferon (alpha, beta and omega) receptor 2
-1.72	Hs.1948 ribosomal protein S21
-1.72	Hs.293007 aminopeptidase puromycin sensitive
-1.72	Hs.173381 dihydropyrimidinase-like 2
-1.72	Hs.42409 CGI-146 protein
-1.71	Hs.1600 chaperonin containing TCP1, subunit 5 (epsilon)
-1.71	Hs.97681 DNA (cytosine-5-)-methyltransferase 2
-1.71	Hs.144931 ATPase, aminophospholipid transporter (APLT), Class I, type 8A, member 1
-1.70	Hs.288106 hypothetical protein FLJ21168
-1.70	Hs.323712 KIAA0615 gene product
-1.70	Hs.187835 acyl-Coenzyme A oxidase 1, palmitoyl
-1.70	Hs.326248 Homo sapiens cDNA: FLJ22071 fis, clone HEP11691
-1.70	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

UP REGULATED IN FUGETAXIS COMPARED TO CHEMOKINESIS SDF-1 GRADIENTS	
39.87	Hs.80358 SMC (mouse) homolog, Y chromosome
35.11	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
33.40	Hs.180911 ribosomal protein S4, Y-linked
13.24	Hs.155397 Homo sapiens mRNA; cDNA DKFZp564K143 (from clone DKFZp564K143)
12.03	Hs.75184 chitinase 3-like 1 (cartilage glycoprotein-39)
10.84	Hs.78913 chemokine (C-X3-C) receptor 1
10.01	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
8.19	Hs.193145 ubiquitin specific protease 9, Y chromosome (Drosophila fat facets related)
8.08	Hs.75184 chitinase 3-like 1 (cartilage glycoprotein-39)
7.64	Hs.100000 S100 calcium-binding protein A8 (calgranulin A)
6.57	Hs.10308 natural killer cell group 7 sequence
6.42	Hs.153837 myeloid cell nuclear differentiation antigen
6.10	Hs.77438 pleckstrin
5.97	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
5.87	Hs.137583 peptidoglycan recognition protein
5.51	Hs.81685 v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog
5.36	Hs.195432 aldehyde dehydrogenase 2 family (mitochondrial)
5.26	Hs.204238 lipocalin 2 (oncogene 24p3)
5.15	Hs.123079 Glutamate transporter II variant BHBGT IIB (5 region) human, brain and spinal cord, mRNA Partial Mutant, 129 nt
4.99	Hs.301636 peroxisomal biogenesis factor 6
4.99	Hs.2962 S100 calcium-binding protein P
4.94	Hs.250700 tryptase beta 1
4.75	Hs.158303 PR domain containing 1, with ZNF domain
4.63	Hs.19413 S100 calcium-binding protein A12 (calgranulin C)
4.46	Hs.41 carcinoembryonic antigen-related cell adhesion molecule 8
4.20	Hs.76171 CCAATenhancer binding protein (CEBP), alpha
4.17	Hs.2582 defensin, alpha 4, corticostatin
4.08	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
3.99	Hs.7724 KIAA0963 protein
3.99	Hs.130760 myosin phosphatase, target subunit 2
3.94	Hs.177605 killer cell lectin-like receptor subfamily C, member 2
3.94	Hs.258588 olfactory receptor, family 1, subfamily A, member 2
3.92	Hs.74076 CD163 antigen
3.91	Hs.286124 CD24 antigen (small cell lung carcinoma cluster 4 antigen)
3.91	Hs.181353 UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2
3.89	Hs.298469 angiotensin I converting enzyme (peptidyl-dipeptidase A) 1
3.87	Hs.273321 differentially expressed in hematopoietic lineages
3.86	Hs.13040 G protein-coupled receptor 86
3.84	Hs.18551 neuroblastoma (nerve tissue) protein
3.79	Hs.6527 G protein-coupled receptor 56
3.77	Hs.75703 small inducible cytokine A4 (homologous to mouse Mip-1b)
3.70	Hs.42346 calcineurin-binding protein calsardin-1
3.66	Hs.287539 hypothetical protein FLJ12662
3.65	Hs.232070 telomerase-associated protein 1
3.64	Hs.233634 hypothetical protein FLJ14220
3.63	Hs.183125 killer cell lectin-like receptor F1
3.62	Hs.239500 KIAA0273 gene product
3.59	Hs.196352 neutrophil cytosolic factor 4 (40kD)
3.57	Hs.301540 sepiapterin reductase (7,8-dihydrobiopterin:NADP+ oxidoreductase)
3.55	Hs.105938 lactotransferrin
3.51	Hs.56336 protein kinase, Y-linked
3.51	Hs.294158 tryptase beta 2
3.50	Hs.621 lectin, galactoside-binding, soluble, 3 (galectin 3)
3.47	Hs.36978 melanoma antigen, family A, 3
3.45	Hs.352 folate receptor 3 (gamma)
3.45	Hs.198037 KIAA0599 protein

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

3.40	Hs.89499 arachidonate 5-lipoxygenase
3.38	Hs.57975 calsequestrin 2 (cardiac muscle)
3.35	Hs.167380 BLu protein
3.34	Hs.2621 cystatin A (stefin A)
3.34	Hs.1619 achaete-scute complex (Drosophila) homolog-like 1
3.34	Hs.8719 hypothetical protein MGC1136
3.30	Hs.129708 tumor necrosis factor (ligand) superfamily, member 14
3.29	Hs.25817 BTB (POZ) domain containing 2
3.29	Hs.172631 Integrin, alpha M (complement component receptor 3, alpha; also known as CD11b (p170), macrophage antigen alpha polypeptide)
3.25	Hs.37142 ephrin-A5
3.23	Hs.127384 DKFZP564C196 protein
3.21	Hs.80248 RNA-binding protein gene with multiple splicing
3.21	Hs.242407 G protein-coupled receptor, family C, group 5, member B
3.20	Hs.248159 persephin
3.19	Hs.293266 sperm protein associated with the nucleus, X chromosome, family member A1
3.12	Hs.107716 hypothetical protein FLJ22344
3.11	Hs.139425 Homo sapiens cDNA FLJ12744 fis, clone NT2RP2000715
3.10	Hs.82112 Interleukin 1 receptor, type I
3.07	Hs.785 Integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B)
3.06	Hs.17752 phosphatidylserine-specific phospholipase A1alpha
3.03	Hs.190846 Homo sapiens GREB1b (GREB1) mRNA, complete cds, alternatively spliced
3.01	Hs.79516 brain abundant, membrane attached signal protein 1
3.00	Hs.226014 Human DNA sequence from clone 240B8 on chromosome 6p11.2-q12. Contains the 3 part of a gene for a novel protein similar to T-STAR, Etoile, Sam68, SLM1 and p62 Tyrosine Phosphoprotein. Contains ESTs, STSs, GSSs and genomic marker D6S1695
2.98	Hs.76807 major histocompatibility complex, class II, DR alpha
2.98	Hs.181128 ELK1, member of ETS oncogene family
2.98	Hs.92381 nudix (nucleoside diphosphate linked moiety X)-type motif 4
2.95	granulysin
2.94	Hs.75990 haptoglobin
2.94	Hs.2142 5-hydroxytryptamine (serotonin) receptor 3A
2.91	Hs.75260 mitogen inducible 2
2.87	Hs.181353 UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2
2.85	Hs.278528 tryptase, alpha
2.81	Hs.274562 Homo sapiens mRNA; cDNA DKFZp434E2028 (from clone DKFZp434E2028)
2.77	Hs.3195 small inducible cytokine subfamily C, member 1 (lymphotactin)
2.77	Hs.332045 Homo sapiens cDNA FLJ20161 fis, clone COL09252, highly similar to L33930 Homo sapiens CD24 signal transducer mRNA
2.76	Hs.141498 MAGE-like 2
2.75	Hs.122552 G-2 and S-phase expressed 1
2.73	Hs.164960 BarH-like homeobox 1
2.71	Hs.129706 paired box gene 4
2.70	Hs.77436 pleckstrin
2.70	Hs.119597 stearoyl-CoA desaturase (delta-9-desaturase)
2.70	Hs.130546 hypothetical protein FLJ20449
2.69	Hs.301417 AHNK nucleoprotein (desmoyokin)
2.68	Hs.272278 cholinergic receptor, nicotinic, alpha polypeptide 9
2.64	Hs.76722 CCAATenhancer binding protein (CEBP), delta
2.64	Hs.75607 myristoylated alanine-rich protein kinase C substrate (MARCKS, 80K-L)
2.64	Hs.307177 Human SH3 domain-containing protein SH3P17, mRNA, complete cds
2.63	Hs.250696 KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3
2.61	Hs.108196 HSPC037 protein
2.60	Hs.79006 deoxythymidylate kinase (thymidylate kinase)
2.56	Hs.256986 ESTs, Moderately similar to VPP2_HUMAN VACUOLAR PROTON TRANSLOCATING ATPASE 116 KDA SUBUNIT A ISOFORM 2 H.sapiens
2.55	Hs.198003 sarcosine dehydrogenase
2.54	Hs.112259 T cell receptor gamma locus
2.52	Hs.52931 adrenergic, alpha-1A-, receptor

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

2.51	Hs.50929 hypothetical protein FLJ13842
2.50	Hs.123030 Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
2.47	Hs.302046 Homo sapiens mRNA; cDNA DKFZp564C163 (from clone DKFZp564C163)
2.46	Hs.54517 ficolin (collagenfibrinogen domain-containing lectin) 2 (huclon)
2.44	Hs.79706 pleclin 1, intermediate filament binding protein, 500kD
2.44	Hs.274509 T cell receptor gamma constant 2
2.44	Hs.192662 hypothetical protein FLJ10469
2.42	Hs.81182 histamine N-methyltransferase
2.41	Hs.272034 hypothetical protein PRO2822
2.39	Hs.112259 T cell receptor gamma locus
2.38	gb:BC008252.1 /DEF=Homo sapiens, clone MGC:10619, mRNA, complete cds.
2.38	Hs.307187 H.sapiens mRNA for soluble delta TCR
2.37	Hs.283640 clg01 protein
2.37	Hs.196352 neutrophil cytosolic factor 4 (40kD)
2.37	Hs.143212 cystatin F (leukocystatin)
2.36	Hs.211869 dickkopf (Xenopus laevis) homolog 2
2.34	Hs.105700 secreted frizzled-related protein 4
2.34	Hs.183805 ankyrin 1, erythrocytic
2.34	Hs.78909 butyrate response factor 2 (EGF-response factor 2)
2.34	Hs.150443 KIAA0320 protein
2.33	Hs.171921 sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C
2.33	Hs.287372 V1R-like 1
2.32	Hs.2014 T cell receptor delta locus
2.30	gb:M18728.1 /DEF=Human nonspecific crossreacting antigen mRNA, complete cds.
2.30	Hs.287778 Human DNA sequence from clone RP11-318P23 on chromosome 20 Contains a TAR DNA-binding protein pseudogene. ESTs, STSs and GSSs
2.29	Hs.16611 tumor protein D52-like 1
2.29	Hs.195464 filamin A, alpha (actin-binding protein-280)
2.26	Hs.3066 granzyme K (serine protease, granzyme 3; tryptase II)
2.26	Hs.169824 killer cell lectin-like receptor subfamily B, member 1
2.25	Hs.171596 EphA2
2.25	Hs.81988 disabled (Drosophila) homolog 2 (mitogen-responsive phosphoprotein)
2.24	Hs.149255 phosphatidylinositol-4-phosphate 5-kinase, type I, alpha
2.24	Hs.306664 Homo sapiens cDNA FLJ14061 fis, clone HEMBB1000749
2.23	Hs.80731 autocrine motility factor receptor
2.23	Hs.74085 DNA segment on chromosome 12 (unique) 2469 expressed sequence
2.23	Hs.301289 Homo sapiens cDNA FLJ12427 fis, clone MAMMA1003127, highly similar to MYOSIN I ALPHA
2.22	Hs.272209 Homo sapiens cDNA FLJ10133 fis, clone HEMBA1003067
2.21	Hs.112259 T cell receptor gamma locus
2.21	Hs.195464 filamin A, alpha (actin-binding protein-280)
2.19	Hs.83169 matrix metalloproteinase 1 (interstitial collagenase)
2.19	Hs.93728 pre-B-cell leukemia transcription factor 2
2.18	Hs.98428 homeo box B6
2.18	Hs.143897 dysferlin, limb girdle muscular dystrophy 2B (autosomal recessive)
2.17	Hs.7647 MYC-associated zinc finger protein (purine-binding transcription factor)
2.17	Hs.2200 perforin 1 (pore forming protein)
2.16	Hs.78944 regulator of G-protein signalling 2, 24kD
2.16	Hs.183805 ankyrin 1, erythrocytic
2.16	Hs.75909 KIAA0182 protein
2.16	Hs.287621 hypothetical protein FLJ14069
2.15	Hs.112360 prominin (mouse)-like 1
2.15	Hs.169266 neuropeptide Y receptor Y1
2.15	Hs.118796 annexin A6
2.15	Hs.195464 filamin A, alpha (actin-binding protein-280)
2.14	Hs.50964 carcinoembryonic antigen-related cell adhesion molecule 1 (biliary glycoprotein)
2.13	Hs.183805 ankyrin 1, erythrocytic
2.10	Hs.553 solute carrier family 6 (neurotransmitter transporter, serotonin), member 4

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

2.09	Hs.2463 angiotensin 1
2.09	Hs.1724 interleukin 2 receptor, alpha
2.09	Hs.306667 Homo sapiens cDNA FLJ14076 fis, clone HEMBB1001925
2.07	Hs.308026 major histocompatibility complex, class II, DR beta 5
2.07	Hs.107526 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5
2.05	intersectin 1 (SH3 domain protein)
2.04	Hs.143288 hypothetical protein MGC11271
2.04	Hs.45743 adenosine A2b receptor
2.04	Hs.2014 T cell receptor delta locus
2.04	Hs.192657 NPHS2 gene (podocin)
2.03	Hs.75106 clusterin (complement lysis inhibitor, SP-40,40, sulfated glycoprotein 2, testosterone-repressed prostate message 2, apolipoprotein J)
2.02	Hs.814 major histocompatibility complex, class II, DP beta 1
2.02	Hs.160483 erythrocyte membrane protein band 7.2 (stomatlin)
2.02	Hs.50477 RAB27A, member RAS oncogene family
2.00	Hs.288983 hypothetical protein FLJ21477
2.00	Hs.272391 taste receptor, type 2, member 9
1.98	Hs.858 v-rel avian reticuloendotheliosis viral oncogene homolog B (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3)
1.97	Hs.6641 kinesin family member 5C
1.97	Hs.51305 v-maf musculoaponeurotic fibrosarcoma (avian) oncogene family, protein F
1.96	Hs.7718 hypothetical protein FLJ22678
1.96	Hs.2631 desmoglein 2
1.95	Hs.197114 RNA binding protein; AT-rich element binding factor
1.94	Hs.286079 spinocerebellar ataxia 8
1.94	Hs.13684 hypothetical protein FLJ10761
1.93	Hs.79077 KIAA0233 gene product
1.92	Hs.88411 lymphocyte antigen 117
1.91	Hs.77886 lamin AC
1.91	Hs.116550 ESTs
1.90	Hs.168669 oxoglutarate dehydrogenase (lipoamide)
1.89	Hs.2551 adrenergic, beta-2-, receptor, surface
1.89	Hs.73239 hypothetical protein FLJ10901
1.88	Hs.169222 acrosomal vesicle protein 1
1.88	Hs.69319 CA11
1.87	Hs.79601 /len=613
1.87	Hs.183805 ankyrin 1, erythrocytic
1.87	gb:BC005851.1 /DEF=Homo sapiens, Rho GDP dissociation inhibitor (GDI) alpha, clone MGC:2810, mRNA, complete cds.
1.87	Hs.121555 myosin IE
1.87	Hs.24048 FK506 binding protein precursor
1.86	Hs.195850 keratin 5 (epidermolysis bullosa simplex, Dowling-Meara/Kobner/Weber-Cockayne types)
1.86	Hs.115246 mutS (E. coli) homolog 4
1.86	Hs.41143 phosphoinositide-specific phospholipase C-beta 1
1.85	Hs.181002 MLL septin-like fusion
1.85	gb:NM_031286.1 /DEF=Homo sapiens SH3BGR3-like protein (SH3BGR3), mRNA.
1.84	KIAA0620 protein
1.84	Hs.32168 KIAA0442 protein
1.84	Hs.287534 hypothetical protein FLJ12568
1.83	Hs.139033 paternally expressed 3
1.83	Hs.75725 transgelin 2
1.83	Hs.8257 cytokine inducible SH2-containing protein
1.82	Hs.286049 phosphoserine aminotransferase
1.82	Hs.274150 hypothetical protein FLJ10351
1.81	Hs.289082 GM2 ganglioside activator protein
1.81	Hs.785 Integrin, alpha 2b (platelet glycoprotein IIb of IIb/IIIa complex, antigen CD41B)
1.80	Hs.160483 erythrocyte membrane protein band 7.2 (stomatlin)
1.80	Hs.50477 RAB27A, member RAS oncogene family
1.79	Hs.306531 Homo sapiens caspase-10c mRNA, complete cds

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Pugetaxis SDF-1 Gradients

1.79	Hs.110915 interleukin 22 receptor
1.79	Hs.127561 myosin XV
1.79	Hs.211584 neurofilament, light polypeptide (88kD)
1.78	Hs.155191 villin 2 (ezrin)
1.78	Hs.241570 tumor necrosis factor (TNF superfamily, member 2)
1.78	Hs.304962 solute carrier family 4, sodium bicarbonate cotransporter-like, member 10
1.78	Hs.91299 guanine nucleotide binding protein (G protein), beta polypeptide 2
1.78	Hs.278295 cholinergic receptor, nicotinic, epsilon polypeptide
1.78	Hs.167529 cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 9
1.77	Hs.102119 opsin 1 (cone pigments), short-wave-sensitive (color blindness, tritan)
1.76	dystrophin myotonic-containing VWD repeat motif
1.76	Hs.57749 synaptic nuclei expressed gene 2; KIAA1011 protein
1.76	Hs.99491 RAS guanyl releasing protein 2 (calcium and DAG-regulated)
1.76	Hs.298348 E2k
1.75	Hs.176683 Fc fragment of IgG, low affinity IIb, receptor for (CD16)
1.75	Hs.93837 phosphatidylinositol transfer protein, membrane-associated
1.75	Hs.81256 S100 calcium-binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog)
1.75	Hs.11801 interferon regulatory factor 6
1.75	Hs.214982 laminin, gamma 1 (formerly LAMB2)
1.75	Hs.234799 breakpoint cluster region
1.75	Hs.97672 CTAGE-1 protein
1.74	Hs.195175 CASP8 and FADD-like apoptosis regulator
1.73	aquaporin 3
1.73	Hs.10247 activated leucocyte cell adhesion molecule
1.73	Hs.77910 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 (soluble)
1.73	Hs.44 pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1)
1.73	Hs.195175 CASP8 and FADD-like apoptosis regulator
1.72	Hs.80645 interferon regulatory factor 1
1.72	Hs.77422 proteolipid protein 2 (colonic epithelium-enriched)
1.71	Hs.250696 KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 3
1.71	Hs.44077 alpha-parvin
1.70	Hs.1103 transforming growth factor, beta 1
1.70	Hs.159161 Rho GDP dissociation inhibitor (GDI) alpha
1.70	Hs.153028 cytochrome b-561
1.70	Hs.279562 myelin transcription factor 1

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugotaxis SDF-1 Gradients

DOWN REGULATED IN FUGETAXIS COMPARED TO CHEMOKINESIS SDF-1 GRADIENTS	
-11.90	Hs.76364 allograft inflammatory factor 1
-9.57	Hs.15075 hypothetical protein DKFZp434E2216
-8.17	Hs.740 PTK2 protein tyrosine kinase 2
-7.80	Hs.78409 collagen, type XVIII, alpha 1
-6.94	Hs.156115 potassium voltage-gated channel, KQT-like subfamily, member 1
-6.69	Hs.85752 uncharacterized hematopoietic stemprogenitor cells protein MDS028
-6.20	Hs.82979 mitogen-activating protein kinase kinase kinase kinase 2
-6.13	Hs.74047 electron-transfer-flavoprotein, beta polypeptide
-6.13	Hs.14142 nudix (nucleoside diphosphate linked moiety X)-type motif 2
-6.00	Hs.78146 plateletendothelial cell adhesion molecule (CD31 antigen)
-5.85	Hs.283404 organic cation transporter
-5.76	Hs.76845 phosphoserine phosphatase-like
-5.54	Hs.82985 collagen, type V, alpha 2
-5.45	gb:M24668.1 /DEF=Human Ig rearranged H-chain V-region mRNA (C-D-JH4), complete cds.
-5.33	Hs.3743 matrix metalloproteinase 24 (membrane-inserted)
-5.30	Hs.165662 KIAA0675 gene product
-5.29	Hs.76591 KIAA0887 protein
-4.87	Hs.2399 matrix metalloproteinase 14 (membrane-inserted)
-4.86	Hs.68435 FYN-binding protein (FYB-120130)
-4.83	Hs.93597 cyclin-dependent kinase 5, regulatory subunit 1 (p35)
-4.59	Hs.226581 COX15 (yeast) homolog, cytochrome c oxidase assembly protein
-4.47	Hs.121102 vanin 2
-4.41	Hs.315478 Homo sapiens, Similar to pericentriolar material 1, clone MGC:8458, mRNA, complete cds
-4.39	Hs.25477 hypothetical protein FLJ21044 similar to Rblg1
-4.36	Hs.306781 Homo sapiens cDNA: FLJ21535 fs, clone COL06131
-4.29	Hs.22370 Homo sapiens mRNA; cDNA DKFZp564O0122 (from clone DKFZp564O0122)
-4.26	Hs.168737 ESTs, Highly similar to 2AAB HUMAN SERINETHREONINE PROTEIN PHOSPHATASE 2A, 65 KDA REGULATORY SUBUNIT A, BETA ISOFORM H.sapiens
-4.25	Hs.287912 lectin, mannose-binding, 1
-4.16	Hs.158241 KIAA0507 protein
-4.13	Hs.293334 ESTs
-4.11	Hs.24322 ATPase, H+ transporting, lysosomal (vacuolar proton pump) 9kD
-4.05	Hs.99987 excision repair cross-complementing rodent repair deficiency, complementation group 2 (xeroderma pigmentosum D)
-4.02	Hs.11135 major histocompatibility complex, class II, DN alpha
-3.99	Hs.41693 DnaJ (Hsp40) homolog, subfamily B, member 4
-3.98	Hs.73172 growth factor independent 1
-3.97	Hs.203269 ESTs, Moderately similar to ALU8_HUMAN ALU SUBFAMILY SX SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-3.95	Hs.197335 plasma glutamate carboxypeptidase
-3.93	gb:M24669.1 /DEF=Human Ig rearranged H-chain V-region mRNA (C-D-JH6), complete cds.
-3.92	Hs.296745 Homo sapiens cDNA FLJ13833 fs, clone THYRO1000676
-3.91	Hs.112751 KIAA0892 protein
-3.88	Hs.332381 hypothetical protein MGC4645
-3.75	Hs.225939 sialyltransferase 9 (CMP-NeuAc: lactosylceramide alpha-2,3-sialyltransferase; GM3 synthase)
-3.72	Hs.180686 ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome)
-3.70	Hs.264 GS2 gene
-3.68	Hs.48269 vaccinia related kinase 1
-3.68	Hs.1975 hypothetical protein FLJ21007
-3.64	Hs.208646 KIAA1118 protein
-3.63	Hs.11127 PET112 (yeast homolog)-like
-3.60	Hs.44865 lymphoid enhancer binding factor-1
-3.59	Hs.286821 Human facioscapulohumeral muscular dystrophy (FSHD) gene region, D4Z4 tandem repeat unit
-3.55	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-3.53	Hs.117242 meningioma expressed antigen 6 (coiled-coil proline-rich)
-3.52	Hs.106650 hypothetical protein FLJ20533

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Pugetaxis SDF-1 Gradients

-3.50	Hs.279862 cdk inhibitor p21 binding protein
-3.48	Hs.8173 hypothetical protein FLJ10803
-3.46	Hs.86178 M-phase phosphoprotein 9
-3.44	Hs.20894 N-deacetylaseN-sulfotransferase (heparan glucosaminyl) 1
-3.44	Hs.168586 NCX protein
-3.44	Hs.73980 troponin T1, skeletal, slow
-3.43	Hs.237323 N-acetylglucosamine-phosphate mutase
-3.43	Hs.132560 hypothetical protein FLJ10312
-3.42	gb:NM_030895.1 /DEF=Homo sapiens hypothetical protein FLJ14129 (FLJ14129), mRNA.
-3.41	Hs.89560 Iduronidase, alpha-L-
-3.37	Hs.184019 Homo sapiens clone 23551 mRNA sequence
-3.37	Hs.121128 BCR downstream signaling 1
-3.32	Hs.262869 plasminogen-like
-3.29	Hs.129218 KIAA1074 protein
-3.29	Hs.47344 advillin
-3.24	Hs.223014 antizyme inhibitor
-3.17	Hs.78518 natriuretic peptide receptor Bguanylate cyclase B (atrionatriuretic peptide receptor B)
-3.17	Hs.158688 KIAA0741 gene product
-3.17	Hs.20137 hypothetical protein DKFZp434P0116
-3.15	Hs.155049 hypothetical protein FLJ11282
-3.15	Hs.120769 Homo sapiens cDNA FLJ20463 fis, clone KAT06143
-3.13	Hs.173594 serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antipain, pigment epithelium derived factor), member 1
-3.12	Hs.7426 KIAA0841 protein
-3.11	Hs.61712 pyruvate dehydrogenase kinase, isoenzyme 1
-3.11	Hs.110796 SAR1 protein
-3.11	Hs.105478 phosphoribosylformylglycinamide synthase (FGAR amidotransferase)
-3.10	Hs.14286 flavin containing monooxygenase 5
-3.08	Hs.61289 synaptotagmin 2
-3.06	Hs.23796 odz (odd Ozten-m, Drosophila) homolog 1
-3.04	Hs.249216 H2B histone family, member J
-3.03	Hs.6179 DEADH (Asp-Glu-Ala-AspHis) box polypeptide 17 (72kD)
-3.03	Hs.104916 hypothetical protein FLJ21940
-3.03	Hs.184523 KIAA0965 protein
-3.03	Hs.175038 HSPC056 protein
-3.02	Hs.314534 ESTs, Moderately similar to ALU5_HUMAN ALU SUBFAMILY SC SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-3.01	Hs.9192 Homer, neuronal immediate early gene, 1B
-2.99	Hs.296371 RAB28, member RAS oncogene family
-2.99	Hs.49994 Homo sapiens, clone MGC:10871, mRNA, complete cds
-2.98	Hs.305960 hemoglobin, gamma A
-2.97	Hs.29189 ATPase, Class VI, type 11A
-2.94	Hs.109526 zinc finger protein 198
-2.94	Hs.287763 Human DNA sequence from clone RP1-23O21 on chromosome 6. Contains an acidic calponin 3 (CNN3) pseudogene, STSs and GSSs
-2.93	Hs.279803 hypothetical protein DKFZp568H0824
-2.93	Hs.28899 KIAA0285 gene product
-2.93	Hs.325530 KIAA1067 protein
-2.92	Hs.227280 U6 snRNA-associated Sm-like protein
-2.92	Hs.129928 KIAA0477 gene product
-2.91	Hs.79993 peroxisomal biogenesis factor 7
-2.90	Hs.109655 sex comb on midleg (Drosophila)-like 1
-2.89	Hs.13501 pescadillo (zebrafish) homolog 1, containing BRCT domain
-2.89	Hs.86178 M-phase phosphoprotein 9
-2.88	Hs.79170 KIAA0227 protein
-2.86	Hs.42331 ephrin-A4
-2.86	Hs.44697 ATPase, Class V, type 10C
-2.84	Hs.18069 protease, cysteine, 1 (legumain)
-2.84	Hs.211933 collagen, type XIII, alpha 1

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

-2.82	Hs.20019 hemochromatosis
-2.81	Human DNA sequence from clone RP5-1163J1 on chromosome 22q13.2-13.33 Contains the 3' part of a gene for a novel KIAA0279 LIKE EGF-like domain containing protein (similar to mouse Celsr1, rat MEGF2), a novel gene for a protein similar to C. elegans B0035.1
-2.81	Hs.221040 HBS1 (S. cerevisiae)-like
-2.80	Hs.292998 ESTs
-2.79	Hs.38783 SKI-like
-2.79	Hs.168625 androgen-induced prostate proliferative shutoff associated protein
-2.78	Hs.174185 ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin)
-2.77	Hs.1460 glucagon
-2.77	Hs.23585 KIAA1078 protein
-2.75	Hs.5241 fatty acid binding protein 1, liver
-2.75	Hs.82527 sialyltransferase 8 (alpha-N-acetylneuraminase; alpha-2,8-sialyltransferase, GD3 synthase) A
-2.75	Hs.31478 Homo sapiens cDNA FLJ13872 fis, clone THYRO1001322
-2.72	Hs.18858 phospholipase A2, group IVC (cytosolic, calcium-independent)
-2.69	KIAA1117 protein
-2.69	Hs.26471 Homo sapiens clone HQ0692
-2.69	Hs.239114 mannosidase, alpha, class 1A, member 2
-2.68	Hs.226213 cytochrome P450, 51 (lanosterol 14-alpha-demethylase)
-2.68	Hs.262869 plasminogen-like
-2.68	gb:BC006356.1 /DEF=Homo sapiens, NCX protein, clone MGC:12870, mRNA, complete cds.
-2.68	Hs.106823 H.sapiens gene from PAC 42616, similar to syntaxin 7
-2.68	Hs.294014 ESTs
-2.65	Hs.75574 mitochondrial ribosomal protein L19
-2.65	Hs.168640 ankylosis, progressive (mouse) homolog
-2.64	Hs.241493 natural killer-tumor recognition sequence
-2.62	Hs.100014 glutamate receptor, ionotropic, AMPA 3
-2.62	Hs.2864 early endosome antigen 1, 162kD
-2.62	Hs.79368 epithelial membrane protein 1
-2.60	Hs.13980 ubiquitously transcribed tetratricopeptide repeat gene, X chromosome
-2.60	Hs.28777 H2A histone family, member L
-2.60	Hs.274131 Down syndrome critical region gene 1-like 2
-2.58	Hs.170307 Ras guanine nucleotide exchange factor RalGPS1A
-2.58	Hs.94037 hypothetical protein FLJ23053
-2.58	Hs.295923 seven in absentia (Drosophila) homolog 1
-2.57	Hs.46821 hypothetical protein FLJ20086
-2.56	Hs.144563 tryptophan hydroxylase (tryptophan 5-monooxygenase)
-2.56	Hs.35091 hypothetical protein FLJ10775
-2.55	Hs.288931 Homo sapiens cDNA FLJ13034 fis, clone NT2RP3001232
-2.55	Hs.171545 HIV-1 Rev binding protein
-2.53	Hs.59594 /len=529
-2.53	Hs.194669 enhancer of zeste (Drosophila) homolog 1
-2.53	Hs.151010 ESTs
-2.52	Hs.6700 /len=604
-2.51	Hs.207805 Homo sapiens mRNA; cDNA DKFZp564i066 (from clone DKFZp564i066)
-2.49	Hs.165662 KIAA0675 gene product
-2.49	Hs.183291 zinc finger protein 268
-2.49	Hs.73742 ribosomal protein, large, P0
-2.49	Hs.12533 Homo sapiens clone 23705 mRNA sequence
-2.49	Hs.271926 serologically defined colon cancer antigen 16
-2.48	Hs.74624 protein tyrosine phosphatase, receptor type, N polypeptide 2
-2.48	Hs.222306 hypothetical protein MGC3329
-2.47	Hs.968 collagen
-2.47	Hs.158205 basic leucine zipper nuclear factor 1 (JEM-1)
-2.45	Hs.271699 polymerase (DNA directed) iota
-2.44	Hs.5131 hypothetical protein FLJ20654
-2.43	Hs.237849 ESTs
-2.42	Hs.32942 phosphoinositide-3-kinase, catalytic, gamma polypeptide

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

-2.42	Hs.40202 lymphoid-restricted membrane protein
-2.42	Hs.188710 ESTs
-2.38	Hs.17200 STAM-like protein containing SH3 and ITAM domains 2
-2.38	Hs.170279 tissue factor pathway inhibitor (lipoprotein-associated coagulation inhibitor)
-2.38	Hs.36972 CD7 antigen (p41)
-2.37	Hs.101299 cullin 5
-2.37	Hs.2558 bone gamma-carboxylglutamate (gla) protein (osteocalcin)
-2.37	Hs.272572 hemoglobin, alpha 2
-2.35	Hs.82919 cullin 2
-2.35	Hs.171558 sex comb on midleg (Drosophila)-like 2
-2.35	Hs.95907 multiple inositol polyphosphate phosphatase 1
-2.35	Hs.210431 Homo sapiens mRNA; cDNA DKFZp434N144 (from clone DKFZp434N144)
-2.34	Hs.11494 fibulin 5
-2.34	Hs.25155 neuroepithelial cell transforming gene 1
-2.34	Hs.78146 plateletendothelial cell adhesion molecule (CD31 antigen)
-2.34	Hs.23642 protein predicted by clone 23627
-2.34	Hs.278064 Homo sapiens cDNA: FLJ23327 fis, clone HEP12630, highly similar to HSZNF37 Homo sapiens ZNF37A mRNA for zinc finger protein
-2.33	Hs.5022 imprinted in Prader-Willi syndrome
-2.32	Hs.78946 cullin 3
-2.32	Hs.23240 Homo sapiens cDNA FLJ13496 fis, clone PLACE1004471, weakly similar to ZINC FINGER PROTEIN 83
-2.31	Hs.223241 eukaryotic translation elongation factor 1 delta (guanine nucleotide exchange protein)
-2.30	Hs.194148 v-src-1 Yamaguchi sarcoma viral oncogene homolog 1
-2.30	gb:S82471.1 /DEF=Homo sapiens Kruppel-associated box containing gene product SSX3 (SSX3) mRNA, complete cds.
-2.30	Hs.86434 hypothetical protein FLJ21816
-2.28	Hs.175941 B-cell receptor-associated protein BAP29
-2.26	Hs.96264 alpha thalassemia mental retardation syndrome X-linked (RAD54 (S. cerevisiae) homolog)
-2.26	Hs.75231 solute carrier family 16 (monocarboxylic acid transporters), member 1
-2.26	Hs.69569 KIAA1098 protein
-2.25	Hs.23964 sin3-associated polypeptide, 18kD
-2.25	Hs.94376 proprotein convertase subtilisin/kexin type 5
-2.25	Hs.62187 phosphatidylinositol glycan, class K
-2.25	Hs.272534 Homo sapiens mRNA; cDNA DKFZp564J062 (from clone DKFZp564J062)
-2.24	Hs.74861 activated RNA polymerase II transcription cofactor 4
-2.23	Hs.306602 Homo sapiens cDNA FLJ11514 fis, clone HEMBA1002229
-2.22	Hs.279777 hypothetical protein
-2.21	Hs.797 nuclear transcription factor Y, alpha
-2.19	Hs.77868 ORF
-2.18	Hs.102456 survival of motor neuron protein interacting protein 1
-2.18	Hs.234265 DKFZP586G011 protein
-2.17	Hs.117313 Meis (mouse) homolog 3
-2.16	Hs.155140 casein kinase 2, alpha 1 polypeptide
-2.15	gb:NM_031206.1 /DEF=Homo sapiens hypothetical protein FLJ12525 (FLJ12525), mRNA.
-2.15	Hs.100914 hypothetical protein FLJ10352
-2.14	Hs.15791 transmembrane 7 superfamily member 1 (upregulated in kidney)
-2.14	Hs.75694 mannose phosphate isomerase
-2.14	Hs.278985 hypothetical protein
-2.14	Hs.142570 Homo sapiens clone 24629 mRNA sequence
-2.14	Hs.247904 Human DNA sequence from clone 1060K6 on chromosome 20p12.1-13 Contains a pseudogene similar to 40S ribosomal protein S11, ESTs, STSs and GSSs
-2.13	Hs.237146 hypothetical protein FLJ12752
-2.12	Hs.279902 cofactor required for Sp1 transcriptional activation, subunit 9 (33kD)
-2.12	Hs.57553 tousled-like kinase 2
-2.11	Hs.166733 leucylcystinyl aminopeptidase
-2.11	Hs.114408 toll-like receptor 5
-2.10	Hs.119023 SMC2 (structural maintenance of chromosomes 2, yeast)-like 1
-2.10	Hs.22182 zinc finger protein 23 (KOX 16)

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

-2.08	Hs.2815 POU domain, class 6, transcription factor 1
-2.08	Hs.82065 interleukin 6 signal transducer (gp130, oncostatin M receptor)
-2.07	gb:AF356353.1 /DEF=Homo sapiens spindlin-like protein 2 (SPIN2) mRNA, complete cds.
-2.06	Hs.306613 Homo sapiens cDNA FLJ11740 fis, clone HEMBA1005500
-2.06	Hs.105633 hypothetical protein FLJ10583
-2.05	Hs.82143 E74-like factor 2 (ets domain transcription factor)
-2.05	Hs.43549 uncharacterized hematopoietic stemprogenitor cells protein MDS029
-2.04	Hs.283709 lipopolysaccharide specific response-7 protein
-2.03	Hs.126908 hypothetical protein FLJ12994
-2.03	Hs.5997 hypothetical protein FLJ13078
-2.02	Hs.202695 Human soluble CD44 (CD44) mRNA, with exon v9 extension, partial cds
-2.02	Hs.42785 DC11 protein
-2.02	gb:NM_031268.1 /DEF=Homo sapiens PRO0461 protein (PRO0461), mRNA.
-2.01	Hs.300741 sorcin
-2.01	Hs.91165 hypothetical protein
-2.00	Hs.24485 chondroin sulfate proteoglycan 6 (bamacan)
-2.00	Hs.311 phosphoribosyl pyrophosphate amidotransferase
-2.00	Hs.296290 Homo sapiens cDNA FLJ13357 fis, clone PLACE1000061, weakly similar to Human ribosomal protein L37a mRNA sequence
-1.99	Hs.251577 hemoglobin, alpha 1
-1.99	Hs.99847 peroxisome biogenesis factor 1
-1.99	Hs.7194 CGI-74 protein
-1.98	Hs.39328 /len=463
-1.98	Hs.96083 Insulin receptor substrate 1
-1.98	Hs.93391 hypothetical protein FLJ10539
-1.98	Hs.48950 heptacellular carcinoma novel gene-3 protein
-1.97	Hs.13226 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 4
-1.96	Hs.234757 Human lipocortin (LIP) 2 pseudogene mRNA, complete cds-like region
-1.96	Hs.302114 Human DNA sequence from clone RP5-843L14 on chromosome 20. Contains ESTs, STSs and GSSs. Contains a novel gene and the 5 part of a gene for a novel protein similar to X-linked ribosomal protein 4 (RPS4X)
-1.96	Hs.283753 cell cycle progression 8 protein
-1.95	Hs.184050 v-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog
-1.95	Hs.2074 zinc finger protein, X-linked
-1.95	Hs.135202 c-myc promoter-binding protein
-1.94	Hs.3530 TLS-associated serine-arginine protein 2
-1.94	Hs.97681 DNA (cytosine-5-)-methyltransferase 2
-1.94	Hs.12835 A kinase (PRKA) anchor protein 7
-1.94	Hs.1592 CDC16 (cell division cycle 16, S. cerevisiae, homolog)
-1.94	Hs.325520 Homo sapiens IMAA mRNA for hLAT1-3TM, complete cds
-1.94	Hs.20447 protein kinase related to S. cerevisiae STE20, effector for Cdc42Hs
-1.93	Hs.155995 KIAA0643 protein
-1.91	Hs.4310 eukaryotic translation initiation factor 1A
-1.91	Hs.20952 Homo sapiens clone 24411 mRNA sequence
-1.91	Hs.16951 DKFZP586P2219 protein
-1.90	Hs.158205 basic leucine zipper nuclear factor 1 (JEM-1)
-1.90	Hs.14968 pleiomorphic adenoma gene 1
-1.90	Hs.33363 DKFZP434N093 protein
-1.89	Hs.300684 calcitonin gene-related peptide-receptor component protein
-1.89	Hs.265561 CD2-associated protein
-1.89	Hs.81452 fatty-acyl-Coenzyme A ligase, long-chain 4
-1.89	Hs.109526 zinc finger protein 198
-1.89	Hs.179507 KIAA0779 protein
-1.87	Hs.16079 hypothetical protein FLJ10233
-1.86	Hs.11899 3-hydroxy-3-methylglutaryl-Coenzyme A reductase
-1.86	Hs.158195 heat shock transcription factor 2
-1.86	Hs.124126 Homo sapiens clone 24438 mRNA sequence
-1.86	Hs.287391 Homo sapiens chromosome 19, cosmid F23269
-1.85	Hs.288986 survival of motor neuron 1, telomeric

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

-1.85	Hs.54697 Cdc42 guanine exchange factor (GEF) 9
-1.85	Hs.239106 solute carrier family 3 (cystine, dibasic and neutral amino acid transporters, activator of cystine, dibasic and neutral amino acid transport), member 1
-1.84	Hs.117852 ATP-binding cassette, sub-family D (ALD), member 2
-1.84	Hs.301114 zinc finger protein 79 (pT7)
-1.84	Hs.285107 hypothetical protein FLJ13397
-1.84	Hs.50578 hypothetical protein FLJ20718
-1.84	Hs.44858 hypothetical protein FLJ12116
-1.84	Hs.278932 CGI-105 protein
-1.84	Hs.293495 ESTs, Weakly similar to ALU1_HUMAN ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-1.83	Hs.9884 spindle pole body protein
-1.83	Hs.170188 KIAA0009 gene product
-1.83	Hs.111244 hypothetical protein
-1.83	Hs.75692 asparagine synthetase
-1.83	Hs.72160 AND-1 protein
-1.83	Hs.324275 Homo sapiens mRNA; cDNA DKFZp434D2111 (from clone DKFZp434D2111)
-1.83	Hs.126779 KIAA0752 protein
-1.81	Hs.184245 KIAA0929 protein Mx2 interacting nuclear target (MINT) homolog
-1.81	Hs.118174 tetratricopeptide repeat domain 3
-1.81	Hs.29131 nuclear receptor coactivator 2
-1.81	Hs.22559 KIAA0197 protein
-1.81	Hs.136644 CS box-containing VWD protein
-1.80	Hs.174795 PDZ domain-containing guanine nucleotide exchange factor 1
-1.79	Hs.122607 B-cell CLL lymphoma 9
-1.79	Hs.78935 methionine aminopeptidase; eIF-2-associated p87
-1.79	Hs.43946 L13 protein
-1.78	Hs.1540 nuclear matrix protein p84
-1.78	Hs.8117 erbB2-interacting protein ERBIN
-1.78	Hs.279851 hypothetical protein FLJ10241
-1.78	Hs.82664 ETAA16 protein
-1.77	Hs.283609 hypothetical protein PRO2032
-1.77	Hs.279819 APR-1 protein
-1.76	Hs.118738 KIAA0800 gene product
-1.76	Hs.118978 KIAA0256 gene product
-1.76	Hs.111373 KIAA0423 protein
-1.76	Hs.22549 hypothetical protein FLJ12789
-1.75	Hs.78221 c-myc binding protein
-1.75	Hs.180324 YY1-associated factor 2
-1.75	Hs.240112 KIAA0276 protein
-1.75	Hs.325667 TMTSP for transmembrane molecule with thrombospondin module
-1.74	Hs.83715 Sjogren syndrome antigen B (autoantigen La)
-1.74	Hs.6241 phosphoinositide-3-kinase, regulatory subunit, polypeptide 1 (p85 alpha)
-1.74	Hs.127416 synaptojanin 1
-1.74	Hs.236642 3-hydroxyisobutyryl-Coenzyme A hydrolase
-1.74	Hs.301800 Homo sapiens cDNA FLJ11568 fis, clone HEMBA1003278
-1.74	Hs.247782 Human DNA sequence from clone 581F12 on chromosome Xq21. Contains Eukaryotic Translation Initiation Factor EIF3 P35 Subunit and 60S Ribosomal protein L22 pseudogenes. Contains ESTs
-1.74	Hs.30057 transporter similar to yeast MRS2
-1.73	Hs.79078 MAD2 (mitotic arrest deficient, yeast, homolog)-like 1
-1.73	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
-1.73	Hs.154740 TBP-interacting protein
-1.73	Hs.247309 succinate-CoA ligase, GDP-forming, beta subunit
-1.72	Hs.180895 putative brain nuclearly-targeted protein
-1.72	Hs.84580 hypothetical protein FLJ11785
-1.72	Hs.249495 heterogeneous nuclear ribonucleoprotein A1
-1.71	Hs.75140 low density lipoprotein-related protein-associated protein 1 (alpha-2-macroglobulin receptor-associated protein 1)
-1.71	Hs.285848 KIAA1454 protein

FIGURE 6

Table 4
Differential Gene Expression in Chemokinesis vs Fugetaxis SDF-1 Gradients

-1.71	Hs.8198 zinc finger protein 204
-1.71	Hs.7432 hypothetical protein FLJ10477
-1.71	Hs.301406 hypothetical protein PP3501
-1.70	Hs.286027 etoposide-induced mRNA
-1.70	Hs.293219 ESTs

FIGURE 7

Table 5
Differential Gene Expression in Medium vs Chemotaxis SDF-1 Gradients

UP REGULATED IN CHEMOTAXIS COMPARED TO MEDIUM SDF-1 GRADIENTS	
78.70	Hs.80358 SMC (mouse) homolog, Y chromosome
71.90	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
54.36	Hs.180911 ribosomal protein S4, Y-linked
29.71	Hs.193145 ubiquitin specific protease 9, Y chromosome (Drosophila fat facets related)
22.20	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
18.91	Hs.155397 Homo sapiens mRNA; cDNA DKFZp564K143 (from clone DKFZp564K143)
16.39	Hs.73931 major histocompatibility complex, class II, DQ beta 1
14.73	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
13.49	Hs.177605 killer cell lectin-like receptor subfamily C, member 2
12.83	Hs.73931 major histocompatibility complex, class II, DQ beta 1
10.71	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
9.06	Hs.301636 peroxisomal biogenesis factor 6
7.34	Hs.2014 T cell receptor delta locus
6.76	Hs.3195 small inducible cytokine subfamily C, member 1 (lymphotactin)
6.19	Hs.326035 early growth response 1
6.08	Hs.56336 protein kinase, Y-linked
5.43	Hs.194689 artemin
5.04	gb:BC005921.1 /DEF=Homo sapiens, chorionic somatomammotropin hormone 1 (placental lactogen), clone MGC:14518, mRNA, complete cds.
4.77	Hs.194748 calcium channel, voltage-dependent, alpha 1G subunit
4.73	Hs.279953 EH domain-binding mitotic phosphoprotein
4.63	gb:M32577.1 /DEF=Human MHC HLA-DQ beta mRNA, complete cds.
4.46	Hs.6891 splicing factor, arginineserine-rich 6
3.99	Hs.187617 hypothetical protein FLJ13941
3.95	Hs.98614 ribosome binding protein 1 (dog 180kD homolog)
3.59	Hs.288915 Homo sapiens cDNA FLJ12346 fis, clone MAMMA1002297, highly similar to Homo sapiens mRNA for Rab6 GTPase activating protein
3.56	Hs.1447 glial fibrillary acidic protein
3.50	Hs.279891 truncated calcium binding protein
3.45	Hs.307105 Human DNA sequence from clone RP11-278J20 on chromosome 6. Contains ESTs, STSs and GSSs. Contains an RBBP4 (retinoblastoma-binding protein 4) pseudogene and a KIAA0797 pseudogene
3.42	Hs.211280 ESTs, Weakly similar to WN7A_HUMAN WNT-7A PROTEIN PRECURSOR H.sapiens
3.36	Hs.184915 zinc finger protein, Y-linked
3.33	Hs.79706 plectin 1, intermediate filament binding protein, 500kD
3.31	Hs.2352 adenylyate cyclase 2 (brain)
3.30	Hs.79019 baculoviral IAP repeat-containing 1
3.16	Hs.75842 dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 1A
3.10	Hs.6363 heparan sulfate 6-O-sulfotransferase
3.06	Hs.307187 H.sapiens mRNA for soluble delta TCR
3.05	Hs.73742 ribosomal protein, large, P0
3.04	Hs.73078 deleted in azoospermia-like
2.96	Hs.306425 Homo sapiens mRNA for KIAA1417 protein, partial cds
2.95	Hs.249216 H2B histone family, member J
2.91	Hs.36972 CD7 antigen (p41)
2.90	Hs.91103 Homo sapiens, Similar to CG2245 gene product, clone MGC:4293, mRNA, complete cds
2.87	Hs.274230 3-phosphoadenosine 5-phosphosulfate synthase 2
2.85	Hs.46332 G protein-coupled receptor 6
2.71	gb:NM_030773.1 /DEF=Homo sapiens beta tubulin 1, class VI (TUBB1), mRNA.
2.71	Hs.21486 signal transducer and activator of transcription 1, 91kD
2.64	Hs.103978 serine/threonine kinase 22B (spermiogenesis associated)
2.59	Hs.164960 BarH-like homeobox 1
2.58	Hs.82503 H.sapiens mRNA for 3'UTR of unknown protein
2.57	Hs.319088 hypothetical protein FLJ10375
2.55	Hs.184915 zinc finger protein, Y-linked
2.49	Hs.37040 platelet-derived growth factor alpha polypeptide
2.44	Hs.23965 solute carrier family 22 (organic anion transporter), member 6
2.41	Hs.306618 Homo sapiens cDNA FLJ11930 fis, clone HEMBB1000441

FIGURE 7

Table 5
Differential Gene Expression in Medium vs Chemotaxis SDF-1 Gradients

2.40	Hs.272268 Human DNA sequence from clone RP1-18C9 on chromosome 20 Contains part of a novel gene similar to acetyl-coenzyme A synthetase, a novel gene (locus D20S101) similar to Gamma-glutamyltranspeptidase (contains CCA trinucleotide repeat), a gene simil
2.39	Hs.2014 T cell receptor delta locus
2.35	Hs.293205 ESTs, Weakly similar to BC39498 1 H.sapiens
2.34	Hs.55481 zinc finger protein 165
2.31	Hs.122764 BRCA1 associated protein
2.31	Hs.299567 G protein-coupled receptor 44
2.28	Hs.3838 serum-inducible kinase
2.25	Hs.79019 baculoviral IAP repeat-containing 1
2.25	gb:NM_030895.1 /DEF=Homo sapiens hypothetical protein FLJ14129 (FLJ14129), mRNA.
2.20	Hs.36972 CD7 antigen (p41)
2.20	Hs.306797 Homo sapiens cDNA: FLJ21648 fis, clone COL08469
2.19	Hs.8077 Homo sapiens mRNA; cDNA DKFZp547E184 (from clone DKFZp547E184)
2.16	Hs.753 formyl peptide receptor 1
2.09	Hs.280380 aminopeptidase
2.06	Hs.18586 KIAA0451 gene product
2.03	Hs.193606 Homo sapiens PAC clone RP5-1093O17 from 7q11.23-q21
1.99	Hs.146025 hypothetical protein FLJ23594
1.96	Hs.33862 ESTs
1.96	Hs.274402 heat shock 70kD protein 1B
1.94	Hs.75887 coatamer protein complex, subunit alpha
1.92	Hs.187805 SRY (sex determining region Y)-box 30
1.91	Hs.1621 immunoglobulin mu binding protein 2
1.90	Hs.15087 KIAA0250 gene product
1.88	Hs.167927 islet cell autoantigen 1 (69kD)
1.86	Hs.39733 postsynaptic protein CRIPT
1.85	Hs.76722 CCAATenhancer binding protein (CEBP), delta
1.84	Hs.265018 hypothetical protein FLJ20635
1.81	Hs.239737 C-terminal binding protein 1
1.80	Hs.33787 vinexin beta (SH3-containing adaptor molecule-1)
1.80	Hs.279582 GTP-binding protein Sara
1.80	Hs.324728 SMA5
1.79	Hs.44766 retinitis pigmentosa 2 (X-linked recessive)
1.77	Hs.288940 five-span transmembrane protein M83
1.74	Hs.247043 type 1 tumor necrosis factor receptor shedding aminopeptidase regulator
1.70	Hs.273099 Homo sapiens cDNA FLJ13712 fis, clone PLACE2000394

FIGURE 7

Table 5
Differential Gene Expression in Medium vs Chemotaxis SDF-1 Gradients

DOWN REGULATED IN CHEMOTAXIS COMPARED TO MEDIUM SDF-1 GRADIENTS	
-10.88	Hs.51120 cathelicidin antimicrobial peptide
-10.70	Hs.73839 ribonuclease, RNase A family, 3 (eosinophil cationic protein)
-6.33	Hs.76845 phosphoserine phosphatase-like
-6.30	Hs.183362 hypothetical protein FLJ20535
-5.27	Hs.89535 bactericidal/permeability-increasing protein
-5.25	Hs.25477 hypothetical protein FLJ21044 similar to Rbig1
-5.18	Hs.26319 KIAA0833 protein
-4.78	Hs.153952 5 nucleotidase (CD73)
-4.51	Hs.4854 cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
-4.36	Hs.99863 elastase 2, neutrophil
-4.32	Hs.75496 small inducible cytokine subfamily A (Cys-Cys), member 20
-4.31	Hs.18889 DKFZP434M183 protein
-4.24	Hs.158278 KIAA0509 protein
-4.22	Hs.84673 troponin I, skeletal, slow
-4.14	Hs.159900 G protein-coupled receptor 15
-3.96	Hs.50748 chromosome 21 open reading frame 18
-3.89	Hs.306434 Homo sapiens mRNA for LST-1N protein
-3.86	Hs.109438 Homo sapiens clone 24775 mRNA sequence
-3.77	Hs.99960 membrane-spanning 4-domains, subfamily A, member 3 (hematopoietic cell-specific)
-3.73	Hs.248085 insulin upstream factor 1
-3.66	Hs.152251 frizzled (Drosophila) homolog 5
-3.62	Hs.248115 growth hormone secretagogue receptor
-3.55	Hs.2257 vitronectin (serum spreading factor, somatomedin B, complement S-protein)
-3.50	Hs.101915 Stargardt disease 3 (autosomal dominant)
-3.42	Hs.272795 hypothetical protein FLJ20359
-3.41	Hs.6164 hypothetical protein FLJ10698
-3.36	Hs.125783 DEME-6 protein
-3.32	Hs.278984 calcium binding protein 2
-3.29	Hs.154495 acetylcholinesterase (YT blood group)
-3.25	Hs.306763 Homo sapiens cDNA: FLJ21442 fis, clone COL04429, highly similar to HSA237839 Homo sapiens mRNA for hypothetical protein
-3.16	Hs.286124 CD24 antigen (small cell lung carcinoma cluster 4 antigen)
-3.13	Hs.1378 annexin A3
-3.10	Hs.949 neutrophil cytosolic factor 2 (65kD, chronic granulomatous disease, autosomal 2)
-3.10	Hs.18653 ESTs
-3.03	Hs.106070 cyclin-dependent kinase inhibitor 1C (p57, Kip2)
-2.96	Hs.111867 GLI-Kruppel family member GLI2
-2.95	Hs.20315 Interferon-induced protein with tetratricopeptide repeats 1
-2.92	Hs.317169 hypothetical protein MGC10715
-2.89	Hs.26208 collagen, type XVI, alpha 1
-2.83	Hs.222153 ESTs, Moderately similar to archvillin H.sapiens
-2.78	Hs.226396 hypothetical protein FLJ11126
-2.73	Hs.58116 homeo box A2
-2.71	Hs.75608 tight junction protein 2 (zona occludens 2)
-2.69	Hs.21223 calponin 1, basic, smooth muscle
-2.69	Hs.251664 insulin-like growth factor 2 (somatomedin A)
-2.69	Hs.33084 solute carrier family 2 (facilitated glucose transporter), member 5
-2.60	Hs.241053 ESTs
-2.57	Hs.2582 defensin, alpha 4, corticostatin
-2.56	Hs.22972 hypothetical protein FLJ13352
-2.56	Hs.179747 ecotropic viral integration site 5
-2.52	Hs.133342 Homo sapiens clone 24566 mRNA sequence
-2.52	Hs.239737 C-terminal binding protein 1
-2.49	Hs.91971 cAMP-regulated guanine nucleotide exchange factor II
-2.48	Hs.9291 Homo sapiens cDNA FLJ13511 fis, clone PLACE1005331, highly similar to Homo sapiens 7h3 protein mRNA

FIGURE 7

Table 5
Differential Gene Expression in Medium vs Chemotaxis SDF-1 Gradients

-2.48	Hs.19520 FXFD domain-containing ion transport regulator 2
-2.47	Hs.77643 FK506-binding protein 1B (12.6 kD)
-2.45	Hs.193716 complement component (3b4b) receptor 1, including Knops blood group system
-2.45	Hs.296355 Homo sapiens cDNA: FLJ23138 fis, clone LNG08913
-2.45	Hs.19131 transcription factor Dp-2 (E2F dimerization partner 2)
-2.45	Hs.274463 defensin, alpha 1, myeloid-related sequence
-2.43	Hs.112049 SET binding factor 1
-2.43	Hs.283664 aspartate beta-hydroxylase
-2.42	Hs.121576 Homo sapiens cDNA FLJ20153 fis, clone COL08656, highly similar to AJ001381 Homo sapiens incomplete cDNA for a mutated allele
-2.37	Hs.287437 Homo sapiens cDNA FLJ11662 fis, clone HEMBA1004629
-2.35	Hs.21858 trinucleotide repeat containing 3
-2.35	Hs.23796 odz (odd Ozten-m, Drosophila) homolog 1
-2.33	Hs.282344 Homo sapiens cDNA FLJ13387 fis, clone PLACE1001136
-2.29	Hs.83623 nuclear receptor subfamily 1, group I, member 3
-2.29	Hs.31432 cardiac ankyrin repeat protein
-2.29	Hs.93758 H4 histone family, member H
-2.28	Hs.3781 similar to murine leucine-rich repeat protein
-2.24	Hs.41716 endothelial cell-specific molecule 1
-2.24	Hs.307353 Homo sapiens Chromosome 16 BAC clone CIT987SK-44M2
-2.22	Hs.292853 ESTs
-2.19	Hs.106552 cell recognition molecule Caspr2
-2.16	Hs.247910 Homo sapiens isolate donor N clone N88K immunoglobulin kappa light chain variable region mRNA, partial cds
-2.14	Hs.93597 cyclin-dependent kinase 5, regulatory subunit 1 (p35)
-2.07	Hs.283683 chromosome 8 open reading frame 4
-2.01	Hs.289056 ESTs, Highly similar to 1312232A kininogen L, high MW H.sapiens
-1.99	Hs.248190 UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4 (GalNAc-T4)
-1.95	Hs.324730 glutathione S-transferase M1
-1.95	Hs.3628 mitogen-activated protein kinase kinase kinase 4
-1.94	Hs.181107 annexin A13
-1.94	Hs.66392 intersectin 1 (SH3 domain protein)
-1.94	Hs.3781 similar to murine leucine-rich repeat protein
-1.90	Hs.1265 branched chain keto acid dehydrogenase E1, beta polypeptide (maple syrup urine disease)
-1.89	Hs.957 putative opioid receptor, neuromedin K (neurokinin B) receptor-like
-1.86	Hs.283330 hypothetical protein PRO1843
-1.82	Hs.249727 hypothetical protein FLJ11798
-1.81	Hs.82685 CD47 antigen (Rb-related antigen, Integrin-associated signal transducer)
-1.79	Hs.184860 CGI-203 protein
-1.74	Hs.212587 Homo sapiens mRNA; cDNA DKFZp566M043 (from clone DKFZp566M043)

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugotaxis SDF-1 Gradients

UP REGULATED IN FUGETAXIS COMPARED TO MEDIUM SDF-1 GRADIENTS	
45.94	Hs.80358 SMC (mouse) homolog, Y chromosome
42.44	Hs.180911 ribosomal protein S4, Y-linked
28.32	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
13.76	Hs.155397 Homo sapiens mRNA; cDNA DKFZp564K143 (from clone DKFZp564K143)
10.45	Hs.183145 ubiquitin specific protease 9, Y chromosome (Drosophila fat facets related)
10.07	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
8.93	Hs.78913 chemokine (C-X3-C) receptor 1
8.52	Hs.2014 T cell receptor delta locus
7.9	Hs.100000 S100 calcium-binding protein A8 (calgranulin A)
7.3	Hs.99120 DEADH (Asp-Glu-Ala-AspHis) box polypeptide, Y chromosome
6.58	Hs.3195 small inducible cytokine subfamily C, member 1 (lymphotactin)
6.38	Hs.73931 major histocompatibility complex, class II, DQ beta 1
6.02	Hs.75184 chitinase 3-like 1 (cartilage glycoprotein-39)
5.57	Hs.76536 transducin (beta)-like 1
5.25	Hs.194366 transthyretin (prealbumin, amyloidosis type I)
5.1	Hs.19413 S100 calcium-binding protein A12 (calgranulin C)
5.07	Hs.251419 Homo sapiens DNA sequence from PAC 845O24 on chromosome 1p36.1-36.2. Contains a gene for a Heterogenous Nuclear Ribonucleoprotein HNRNP C1 LIKE protein and four genes similar to Melanoma Preferentially Expressed Antigen PRAME and KIAA0014. Cont
5.01	Hs.156110 immunoglobulin kappa constant
4.97	gb:AF262973.1 /DEF=Homo sapiens killer cell immunoglobulin-like receptor 3DL1 (KIR3DL1) mRNA, KIR3DL1*00701 allele, complete cds.
4.9	Hs.326737 Homo sapiens, clone MGC:4655, mRNA, complete cds
4.84	Hs.50929 hypothetical protein FLJ13842
4.72	Hs.57975 calsequestrin 2 (cardiac muscle)
4.54	Hs.7358 hypothetical protein FLJ13110
4.51	Hs.177605 killer cell lectin-like receptor subfamily C, member 2
4.44	Hs.79691 LIM domain protein
4.33	Hs.37142 ephrin-A5
4.31	Hs.198396 ATP-binding cassette, sub-family A (ABC1), member 4
4.29	Hs.179665 cyclin-dependent kinase inhibitor 1A (p21, Cip1)
4.15	Hs.8108 disabled (Drosophila) homolog 1
4.15	Hs.54481 low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
4	Hs.77436 plectrin
4	Hs.44278 hypothetical protein FLJ12538 similar to ras-related protein RAB17
3.91	Hs.123030 Human kappa-immunoglobulin germline pseudogene (Chr22.4) variable region (subgroup V kappa II)
3.89	Hs.2730 heterogeneous nuclear ribonucleoprotein L
3.87	Hs.7936 BAI1-associated protein 2
3.85	Hs.112278 arrestin, beta 1
3.82	Hs.75573 centromere protein E (312kD)
3.82	gb:NM_000961.1 /DEF=Homo sapiens prostaglandin I2 (prostaglandin synthase (PTGIS), mRNA.
3.82	Hs.79706 plectin 1, intermediate filament binding protein, 500kD
3.8	Hs.56336 protein kinase, Y-linked
3.79	Hs.306691 Homo sapiens cDNA: FLJ20915 fis, clone ADSE00692
3.76	Hs.182740 ribosomal protein S11
3.76	Hs.9873 likely homolog of rat kinase D-interacting substance of 220 kDa; KIAA1250 protein
3.69	Hs.199250 chloride channel 4
3.66	gb:NM_030615.1 /DEF=Homo sapiens kinesin-like 3 (KNSL3), transcript variant 1, mRNA.
3.66	Hs.10235 chromosome 5 open reading frame 4
3.62	Hs.313951 ESTs
3.6	Hs.294158 tryptase beta 2
3.6	Hs.307187 H.sapiens mRNA for soluble delta TCR
3.57	Hs.132560 hypothetical protein FLJ10312
3.56	Hs.272366 Homo sapiens partial IGHV3 gene for immunoglobulin heavy chain V region, case 2, cell E 172
3.55	Hs.8850 a disintegrin and metalloproteinase domain 12 (meltrin alpha)
3.55	Hs.21486 signal transducer and activator of transcription 1, 91kD
3.54	gb:AF263617.1 /DEF=Homo sapiens killer cell immunoglobulin-like receptor 3DL2 (KIR3DL2) mRNA, KIR3DL2*00801 allele, complete cds.

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

3.53	Hs.169910 KIAA0173 gene product
3.52	Hs.250502 carbonic anhydrase VIII
3.5	Hs.2352 adenylate cyclase 2 (brain)
3.5	gb:M32577.1 /DEF=Human MHC HLA-DQ beta mRNA, complete cds.
3.48	Hs.269926 Homo sapiens cDNA: FLJ21441 fis, clone COL04422
3.47	Hs.155103 eukaryotic translation initiation factor 1A, Y chromosome
3.45	Hs.171814 parathymosin
3.42	Hs.203846 TEA domain family member 3
3.42	Hs.2142 5-hydroxytryptamine (serotonin) receptor 3A
3.38	Hs.14642 chromosome 16 open reading frame 3
3.38	Hs.76722 CCAATenhancer binding protein (CEBP), delta
3.36	Hs.64311 a disintegrin and metalloproteinase domain 17 (tumor necrosis factor, alpha, converting enzyme)
3.35	Hs.177961 Human Chromosome 16 BAC clone CIT987SK-A-388D4
3.35	Hs.153985 solute carrier family 7 (cationic amino acid transporter, y+ system), member 2
3.35	Hs.137569 tumor protein 63 kDa with strong homology to p53
3.34	Hs.132942 GTPase regulator associated with the focal adhesion kinase pp125(FAK); KIAA0621 protein
3.32	Hs.278962 A1M-1 protein
3.31	Hs.104624 aquaporin 9
3.29	Hs.12079 calyntenin-2
3.28	Hs.326198 transcription factor 4
3.24	Hs.127384 DKFZP564C196 protein
3.18	Hs.257174 hypothetical protein FLJ10601
3.17	granulysin
3.16	Hs.171596 EphA2
3.15	gb:NM_030773.1 /DEF=Homo sapiens beta tubulin 1, class VI (TUBB1), mRNA.
3.15	Hs.75137 KIAA0193 gene product
3.11	natriuretic peptide receptor A/guanylate cyclase A (atrionatriuretic peptide receptor A)
3.1	Hs.164960 Barhl-like homeobox 1
3.09	Hs.181581 glutamate receptor, ionotropic, kainate 1
3.07	Hs.82112 interleukin 1 receptor, type I
3.05	Hs.287662 Homo sapiens cDNA: FLJ21424 fis, clone COL04157
3.03	Hs.130546 hypothetical protein FLJ20449
3.03	Hs.2014 T cell receptor delta locus
3.02	Hs.75617 collagen, type IV, alpha 2
3	Hs.58014 G protein-coupled receptor, family C, group 5, member C
2.99	Hs.118695 potassium voltage-gated channel, subfamily G, member 1
2.99	Hs.247741 protocadherin alpha 2
2.98	Hs.13040 G protein-coupled receptor 86
2.98	Hs.69319 CA11
2.98	Hs.146409 cell division cycle 42 (GTP-binding protein, 25kD)
2.97	Hs.79876 steroid sulfatase (microsomal), arylsulfatase C, isozyme S
2.96	Hs.325722 immunoglobulin kappa variable 3D-15
2.93	Hs.284277 Homo sapiens immunoglobulin mu chain antibody MO30 (IgM) mRNA, complete cds
2.87	gb:AF349720.1 /DEF=Homo sapiens magphlinin beta (TRO) mRNA, complete cds.
2.82	Hs.79706 plectin 1, intermediate filament binding protein, 500kD
2.79	Hs.694 interleukin 3 (colony-stimulating factor, multiple)
2.79	Hs.131361 pyruvate dehydrogenase (lipoamide) alpha 2
2.74	Hs.265848 similar to rat myomegalin
2.72	Hs.274230 3-phosphoadenosine 5-phosphosulfate synthase 2
2.72	Hs.306643 Homo sapiens cDNA FLJ13302 fis, clone OVARC1001357
2.71	Hs.153837 myeloid cell nuclear differentiation antigen
2.71	Hs.621 lectin, galactoside-binding, soluble, 3 (galectin 3)
2.69	Hs.227751 lectin, galactoside-binding, soluble, 1 (galectin 1)
2.69	Hs.84152 cystathionine-beta-synthase
2.69	Hs.48778 niban protein
2.68	Hs.158315 interleukin 18 receptor accessory protein
2.67	Hs.8074 brain-specific angiogenesis inhibitor 3
2.66	Hs.1915 folate hydrolase (prostate-specific membrane antigen) 1

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

2.66	Hs.24322 ATPase, H ⁺ transporting, lysosomal (vacuolar proton pump) 9kD
2.64	Hs.18387 transcription factor AP-2 alpha (activating enhancer-binding protein 2 alpha)
2.63	Hs.118786 metallothionein 2A
2.62	Hs.119571 collagen, type III, alpha 1 (Ehlers-Danlos syndrome type IV, autosomal dominant)
2.59	Hs.10086 type I transmembrane protein Fn14
2.69	Hs.22599 atrophin-1 interacting protein 1; activin receptor interacting protein 1
2.59	Hs.8982 ESTs, Highly similar to KIAA1395 protein H.sapiens
2.64	Hs.235935 nephroblastoma overexpressed gene
2.53	Hs.44205 cortistatin
2.52	Hs.692 tumor-associated calcium signal transducer 1
2.52	Hs.31792 hypothetical protein FLJ11062
2.52	Hs.282693 ESTs
2.51	Hs.223014 antizyme inhibitor
2.5	Hs.96744 prostate androgen-regulated transcript 1
2.5	Hs.41696 keratin, hair, acidic, 1
2.49	Hs.184915 zinc finger protein, Y-linked
2.48	Hs.156346 topoisomerase (DNA) II alpha (170kD)
2.48	Hs.123079 Glutamate transporter II variant BHBGT IIB (5 region) human, brain and spinal cord, mRNA Partial Mutant, 129 nt
2.48	Hs.74085 DNA segment on chromosome 12 (unique) 2489 expressed sequence
2.47	Hs.248189 keratin, hair, acidic, 6
2.46	Hs.76807 major histocompatibility complex, class II, DR alpha
2.46	Hs.157429 SRY (sex determining region Y)-box 3
2.46	Hs.274691 adenylate kinase 3
2.42	Hs.286079 spinocerebellar ataxia 8
2.38	Hs.103124 ATPase, Ca ⁺⁺ transporting, plasma membrane 3
2.38	Hs.90821 ryanodine receptor 2 (cardiac)
2.34	Hs.82101 pleckstrin homology-like domain, family A, member 1
2.3	Hs.88411 lymphocyte antigen 117
2.29	Hs.29287 retinoblastoma-binding protein 8
2.29	Hs.301839 intracellular antigen detected by monoclonal antibody KI-1; intracellular hyaluronan-binding protein
2.28	Hs.294158 tryptase beta 2
2.28	Hs.308026 major histocompatibility complex, class II, DR beta 5
2.27	Hs.128749 alpha-methylacyl-CoA racemase
2.27	Hs.77202 protein kinase C, beta 1
2.26	Hs.54481 low density lipoprotein receptor-related protein 8, apolipoprotein e receptor
2.25	Hs.258580 purinergic receptor P2X, ligand-gated ion channel, 2
2.25	Hs.78944 regulator of G-protein signalling 2, 24kD
2.24	Hs.88411 lymphocyte antigen 117
2.24	Hs.166186 chordin
2.24	Hs.284244 fibroblast growth factor 2 (basic)
2.22	Hs.77886 lamin AC
2.22	Hs.110637 homeo box A10
2.22	Hs.76136 thioredoxin
2.21	Hs.89472 angiotensin receptor 1
2.21	Hs.7242 Homo sapiens mRNA full length insert cDNA clone EUROIMAGE 35907
2.2	Hs.201737 hypothetical protein FLJ14050
2.2	Hs.24385 Human hbc647 mRNA sequence
2.2	Hs.154762 HIV-1 rev binding protein 2
2.19	Hs.159971 SWISNF related, matrix associated, actin dependent regulator of chromatin, subfamily b, member 1
2.19	Hs.62954 ferritin, heavy polypeptide 1
2.18	Hs.201776 zinc finger, imprinted 2
2.18	Hs.272376 olfactory receptor, family 1, subfamily A, member 1
2.18	Hs.280380 aminopeptidase
2.18	Hs.267819 protein phosphatase 1, regulatory (inhibitor) subunit 2
2.17	Hs.105115 absent in melanoma 2
2.16	Hs.121084 eppin-3
2.16	Hs.293205 ESTs, Weakly similar to BC39498 1 H.sapiens

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

2.15	Hs.97084 lymphocyte antigen 94 (mouse) homolog (activating NK-receptor ; NK-p46)
2.15	Hs.93728 pre-B-cell leukemia transcription factor 2
2.14	Hs.89394 POU domain, class 1, transcription factor 1 (Pit1, growth hormone factor 1)
2.14	Hs.246107 elongation of very long chain fatty acids (FEN1Elo2, SUR4Elo3, yeast)-like 2
2.14	Hs.226025 vacuolar protein sorting 45A (yeast homolog)
2.14	Hs.69547 myelin basic protein
2.14	Hs.311 phosphoribosyl pyrophosphate amidotransferase
2.13	Hs.88411 lymphocyte antigen 117
2.13	Hs.287431 hypothetical protein FLJ11598
2.13	Hs.278488 olfactory receptor, family 1, subfamily E, member 2
2.13	Hs.8349 Apobec-1 complementation factor; APOBEC-1 stimulating protein
2.13	Hs.77436 pleckstrin
2.12	Hs.306855 Homo sapiens rab3 interacting protein variant 6 mRNA, partial cds
2.12	Hs.821 biglycan
2.11	Hs.288771 DKFZP586A0522 protein
2.1	Hs.225641 hypothetical protein FLJ13171
2.1	Hs.75825 pleiomorphic adenoma gene-like 1
2.09	Hs.241570 tumor necrosis factor (TNF superfamily, member 2)
2.08	Hs.727 inhibin, beta A (activin A, activin AB alpha polypeptide)
2.08	Hs.164371 hypothetical protein FLJ12439
2.08	Hs.94210 eyes absent (Drosophila) homolog 1
2.08	Hs.306455 Homo sapiens mRNA; cDNA DKFZp434K1126 (from clone DKFZp434K1126)
2.07	Hs.69049 tocopherol (alpha) transfer protein (ataxia (Friedreich-like) with vitamin E deficiency)
2.07	Hs.181353 UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2
2.06	Hs.171811 adenylate kinase 2
2.05	Hs.84298 CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated)
2.04	gb.K03226.1 /DEF=Human preprorenin mRNA, complete cds.
2.04	Hs.858 v-rel avian reticuloendotheliosis viral oncogene homolog B (nuclear factor of kappa light polypeptide gene enhancer in B-cells 3)
2.03	Hs.41707 heat shock 27kD protein 3
2.03	Hs.150443 KIAA0320 protein
2.03	Hs.64639 glioma pathogenesis-related protein
2.03	Hs.77910 3-hydroxy-3-methylglutaryl-Coenzyme A synthase 1 (soluble)
2.03	Hs.3844 LIM domain only 4
2.02	Hs.288869 nuclear receptor subfamily 2, group F, member 2
2.02	Hs.36766 HT017 protein
2.02	Hs.1076 small proline-rich protein 1B (cornifin)
2.02	Hs.306711 Homo sapiens cDNA: FLJ21215 fis, clone COL00526
2.02	Hs.479 RAB5C, member RAS oncogene family
2.01	Hs.78672 laminin, alpha 4
2.01	Hs.164568 fibroblast growth factor 7 (keratinocyte growth factor)
2.01	Hs.102471 KIAA0680 gene product
2	Hs.143212 cystatin F (leukocystatin)
2	Hs.29352 tumor necrosis factor, alpha-induced protein 6
2	Hs.153924 death-associated protein kinase 1
2	Hs.182575 solute carrier family 15 (H+peptide transporter), member 2
1.99	Hs.158330 neuropeptide Y receptor Y5
1.99	Hs.169246 melanoma antigen, family A, 12
1.99	Hs.6580 Homo sapiens cDNA: FLJ23227 fis, clone CAE00645, highly similar to AF052138 Homo sapiens clone 23718 mRNA sequence
1.98	Hs.35101 proline-rich Gla (G-carboxyglutamic acid) polypeptide 2
1.98	Hs.41270 procollagen-lysine, 2-oxoglutarate 5-dioxygenase (lysine hydroxylase) 2
1.97	Hs.13046 thioredoxin reductase 1
1.97	Hs.2667 metallothionein 1H
1.96	Hs.1481 histidine decarboxylase
1.96	Hs.100194 arachidonate 5-lipoxygenase-activating protein
1.95	Hs.41143 phosphoinositide-specific phospholipase C-beta 1
1.94	Hs.166072 annexin A2 pseudogene 2

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

1.94	Hs.295112 KIAA0618 gene product
1.94	— M24537B subtilis pheB, pheA genes corresponding to nucleotides 2017-3334 of M24537 (-5, -M, -3 represent transcript regions 5 prime, Middle, and 3 prime respectively)
1.94	Hs.48778 niban protein
1.93	Hs.29206 Homo sapiens clone 24659 mRNA sequence
1.93	gb:J04755.1 /DEF=Human ferritin H processed pseudogene, complete cds.
1.92	Hs.306508 Homo sapiens mRNA; cDNA DKFZp762O1415 (from clone DKFZp762O1415)
1.92	Hs.13223 Homo sapiens mRNA full length Insert cDNA clone EUROIMAGE 51368
1.92	Hs.21838 hypothetical protein FLJ11191
1.91	Hs.211585 6-phosphofructo-2-kinasefructose-2,6-bisphosphatase 2
1.91	Hs.7358 hypothetical protein FLJ13110
1.91	Hs.195175 CASP8 and FADD-like apoptosis regulator
1.9	Hs.848 FK506-binding protein 4 (59kD)
1.9	Hs.2090 prostaglandin E receptor 2 (subtype EP2), 53kD
1.89	Hs.288983 hypothetical protein FLJ21477
1.89	Hs.50947 T-box 5
1.88	Hs.217493 annexin A2
1.88	Hs.306322 Homo sapiens mRNA; cDNA DKFZp566D153 (from clone DKFZp566D153)
1.88	Hs.158688 KIAA0741 gene product
1.87	Hs.282847 pregnancy specific beta-1-glycoprotein 3
1.87	Hs.239764 /len=924
1.87	Hs.217493 annexin A2
1.87	Hs.217493 annexin A2
1.86	Hs.1521 immunoglobulin mu binding protein 2
1.86	Hs.18878 hypothetical protein FLJ21620
1.85	Hs.302022 PR domain containing 16
1.85	erythropoietin receptor
1.85	Hs.173451 metallothionein 1G
1.85	Hs.293266 sperm protein associated with the nucleus, X chromosome, family member A1
1.84	Hs.180919 inhibitor of DNA binding 2, dominant negative helix-loop-helix protein
1.83	Hs.98303 caveolin 3
1.83	Hs.283725 hypothetical protein FLJ12627
1.83	Hs.274509 T cell receptor gamma constant 2
1.83	Hs.306305 Homo sapiens mRNA; cDNA DKFZp564L102 (from clone DKFZp564L102)
1.83	Hs.119285 /len=716
1.83	Hs.107526 UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 5
1.82	Hs.112259 T cell receptor gamma locus
1.82	Hs.195175 CASP8 and FADD-like apoptosis regulator
1.82	Hs.132781 class I cytokine receptor
1.82	Hs.326392 son of sevenless (Drosophila) homolog 1
1.81	Hs.77886 lamin AC
1.8	Hs.287445 hypothetical protein FLJ11726
1.8	Homo sapiens mRNA; cDNA DKFZp586D0918 (from clone DKFZp586D0918)
1.79	intersectin 1 (SH3 domain protein)
1.79	Hs.272564 muscle disease-related protein
1.79	Hs.88474 prostaglandin-endoperoxide synthase 1 (prostaglandin GH synthase and cyclooxygenase)
1.78	Hs.112259 T cell receptor gamma locus
1.78	gb:NM_031286.1 /DEF=Homo sapiens SH3BGR13-like protein (SH3BGR13), mRNA.
1.77	Hs.287388 histamine H4 receptor
1.77	Hs.211556 hypothetical protein MGC5487
1.77	Hs.195175 CASP8 and FADD-like apoptosis regulator
1.77	Hs.248183 olfactory receptor, family 1, subfamily G, member 1
1.77	Hs.273294 hypothetical protein FLJ20069
1.77	KIAA0674 protein
1.76	growth arrest and DNA-damage-inducible 34
1.76	Hs.110915 interleukin 22 receptor
1.76	Hs.102471 KIAA0680 gene product
1.75	Hs.75825 pleiomorphic adenoma gene-like 1

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

1.75	Hs.61152 exostoses (multiple)-like 2
1.75	Hs.195175 CASP8 and FADD-like apoptosis regulator
1.75	Hs.194019 attractin
1.74	Hs.2200 perforin 1 (pore forming protein)
1.74	Hs.1334 v-myb avian myeloblastosis viral oncogene homolog
1.74	Hs.217493 annexin A2
1.74	Hs.293934 major histocompatibility complex, class II, DR beta 4
1.74	Hs.142023 T cell activation, increased late expression
1.73	gb:NM_031283.1 /DEF=Homo sapiens HMG-box transcription factor TCF-3 (TCF-3), mRNA.
1.73	Hs.122939 /len=646
1.73	Hs.80758 aspartyl-HRNA synthetase
1.73	Hs.270010 KIAA0508 protein
1.72	Hs.169222 acrosomal vesicle protein 1
1.72	Hs.6654 KIAA0657 protein
1.72	Hs.73291 hypothetical protein FLJ10881
1.71	Hs.50964 carcinoembryonic antigen-related cell adhesion molecule 1 (biliary glycoprotein)
1.71	Hs.250615 cytochrome P450, subfamily IIA (phenobarbital-inducible), polypeptide 7
1.71	Hs.153445 Human mRNA for unknown product, partial cds
1.71	Hs.112259 T cell receptor gamma locus
1.71	Hs.272327 Homo sapiens mRNA; cDNA DKFZp434K0423 (from clone DKFZp434K0423); partial cds
1.71	Hs.76536 transducin (beta)-like 1
1.71	3-phosphoinositide dependent protein kinase-1
1.71	Hs.198281 pyruvate kinase, muscle
1.71	Hs.177543 antigen identified by monoclonal antibodies 12E7, F21 and O13
1.7	Hs.195175 CASP8 and FADD-like apoptosis regulator
1.7	Hs.154868 carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
1.7	Hs.289053 hypothetical protein FLJ12474

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Pugetaxis SDF-1 Gradients

DOWN REGULATED IN FUGETAXIS COMPARED TO MEDIUM SDF-1 GRADIENTS

-21.97	Hs.323342 actin related protein 23 complex, subunit 4 (20 kD)
-13.79	Hs.78409 collagen, type XVIII, alpha 1
-11.21	Hs.46907 HEMK homolog 7kb
-9.32	Hs.15075 hypothetical protein DKFZp434E2216
-8.93	Hs.93597 cyclin-dependent kinase 5, regulatory subunit 1 (p35)
-8.88	Hs.85752 uncharacterized hematopoietic stemprogenitor cells protein MDS026
-8.84	Hs.29222 zinc finger protein 76 (expressed in testis)
-8.32	Hs.53155 properdin P factor, complement
-7.73	Hs.289031 hypothetical protein FLJ11848
-7.72	Hs.76845 phosphoserine phosphatase-like
-7.62	Hs.279881 alpha 1,2-mannosidase
-7.44	DOM-3 (C. elegans) homolog Z
-7.43	Hs.74047 electron-transfer-flavoprotein, beta polypeptide
-7.38	Hs.154797 KIAA0090 protein
-7.32	Hs.305960 hemoglobin, gamma A
-7.3	Hs.6051 KIAA0616 protein
-7.18	Hs.25477 hypothetical protein FLJ21044 similar to Rbg1
-7.05	Hs.306434 Homo sapiens mRNA for LST-1N protein
-7.03	Hs.76289 biliverdin reductase B (flavin reductase (NADPH))
-7.01	Hs.109441 hypothetical protein FLJ20707
-6.51	Hs.238679 Rag D protein
-6.47	Hs.38628 hypothetical protein
-6.41	Hs.3743 matrix metalloproteinase 24 (membrane-inserted)
-6.33	Hs.198161 phospholipase A2, group IVB (cytosolic)
-6.3	Hs.306781 Homo sapiens cDNA: FLJ21535 fis, clone COL06131
-6.15	Hs.205450 hypothetical protein FLJ22570
-6.12	Hs.155979 KIAA0295 protein
-6.06	Hs.12142 WD repeat domain 13
-6.04	Hs.99603 hypothetical protein FLJ13134
-5.79	Hs.226396 hypothetical protein FLJ11126
-5.63	Hs.23796 odz (odd Ozten-m, Drosophila) homolog 1
-5.61	Hs.306913 Homo sapiens cDNA: FLJ23564 fis, clone LNG10773
-5.37	Hs.279862 cdk inhibitor p21 binding protein
-5.33	Hs.8128 phosphatidylserine decarboxylase
-5.32	Hs.26045 protein tyrosine phosphatase, receptor type, A
-5.13	Hs.202955 hypothetical protein FLJ20507
-5.01	Hs.14142 nudix (nucleoside diphosphate linked moiety X)-type motif 2
-4.97	Hs.79340 PTH-responsive osteosarcoma B1 protein
-4.96	Hs.36977 hemoglobin, delta
-4.92	Hs.278483 H4 histone family, member E
-4.9	Hs.97176 hypothetical protein FLJ13906 similar to RING finger protein
-4.9	Hs.2399 matrix metalloproteinase 14 (membrane-inserted)
-4.85	Hs.78146 plateletendothelial cell adhesion molecule (CD31 antigen)
-4.8	Hs.12820 SnRNP assembly defective 1 homolog
-4.8	Hs.129903 polymerase (DNA-directed), lambda
-4.8	Hs.7943 RPB5-mediating protein
-4.78	Hs.328457 ESTs
-4.75	Hs.325530 KIAA1067 protein
-4.84	Hs.197335 plasma glutamate carboxypeptidase
-4.56	Hs.6082 f-box and leucine-rich repeat protein 2
-4.55	Hs.159241 polycystic kidney disease 2-like 1
-4.47	Hs.99987 excision repair cross-complementing rodent repair deficiency, complementation group 2 (xeroderma pigmentosum D)
-4.45	Hs.155204 zinc finger protein 174
-4.42	Hs.11135 major histocompatibility complex, class II, DN alpha
-4.39	Hs.20017 chromosome 22 open reading frame 4

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

-4.39	gb:M24688.1 /DEF=Human Ig rearranged H-chain V-region mRNA (C-D-JH4), complete cds.
-4.31	Hs.156115 potassium voltage-gated channel, KQT-like subfamily, member 1
-4.28	Hs.97574 exosome component Rrp41
-4.28	Hs.168737 ESTs, Highly similar to 2AAB_HUMAN SERINETHREONINE PROTEIN PHOSPHATASE 2A, 65 KDA REGULATORY SUBUNIT A, BETA ISOFORM H.sapiens
-4.22	Hs.300772 tropomyosin 2 (beta)
-4.2	Hs.283404 organic cation transporter
-4.19	Hs.103839 erythrocyte membrane protein band 4.1-like 3
-4.18	Hs.101874 mouse double minute 4, human homolog of; p53-binding protein
-4.13	Hs.33818 RecQ protein-like 5
-4.1	Hs.121102 vanin 2
-4.09	Hs.22370 Homo sapiens mRNA; cDNA DKFZp564O0122 (from clone DKFZp564O0122)
-4.06	Hs.38 lymphotoxin alpha (TNF superfamily, member 1)
-4.06	M10098 Human 18S rRNA sequence, length 1969 bases, middle target bases 647-1292
-4.05	Hs.79388 leiomodin 1 (smooth muscle)
-4.02	Hs.110796 SAR1 protein
-4.01	Hs.14286 flavin containing monooxygenase 5
-3.99	Hs.272108 ESTs
-3.98	Hs.112751 KIAA0892 protein
-3.98	Hs.47822 Rho guanine exchange factor (GEF) 11
-3.96	Hs.90443 NADH dehydrogenase (ubiquinone) Fe-S protein 8 (23kD) (NADH-coenzyme Q reductase)
-3.94	Hs.7426 KIAA0841 protein
-3.9	Hs.154085 leucine zipper protein 1
-3.89	gb:NM_030925.1 /DEF=Homo sapiens hypothetical protein FLJ12577 (FLJ12577), mRNA.
-3.86	Hs.102867 sodium-dependent high-affinity dicarboxylate transporter 3
-3.81	gb:BC006441.1 /DEF=Homo sapiens, Similar to RNA polymerase I transcription factor RRN3, clone MGC:13169, mRNA, complete cds.
-3.81	Hs.9857 carbonyl reductase
-3.79	Hs.119498 thyroid hormone receptor interactor 6
-3.77	Hs.194148 v-yes-1 Yamaguchi sarcoma viral oncogene homolog 1
-3.76	Hs.277401 bromodomain adjacent to zinc finger domain, 2A
-3.75	Hs.78921 A kinase (PRKA) anchor protein 1
-3.74	Hs.278084 Homo sapiens cDNA: FLJ23327 fis, clone HEP12630, highly similar to HSZNF37 Homo sapiens ZNF37A mRNA for zinc finger protein
-3.73	gb:NM_030930.1 /DEF=Homo sapiens unc93 (C.elegans) homolog B (UNC93B), mRNA.
-3.7	Hs.1265 branched chain keto acid dehydrogenase E1, beta polypeptide (maple syrup urine disease)
-3.69	Hs.48269 vaccinia related kinase 1
-3.66	Hs.168670 peroxisomal farnesylated protein
-3.66	Hs.155597 D component of complement (adipsin)
-3.66	Hs.291972 ESTs, Moderately similar to SC14_HUMAN SEC14-LIKE PROTEIN H.sapiens
-3.64	Hs.13405 gephyrin
-3.64	Hs.7019 signal-induced proliferation-associated gene 1
-3.61	Hs.285005 mitochondrial import receptor Tom22
-3.61	Hs.210546 Interleukin 21 receptor
-3.58	KIAA1117 protein
-3.57	Hs.44865 lymphoid enhancer binding factor-1
-3.57	Hs.23585 KIAA1078 protein
-3.56	Hs.14846 Homo sapiens mRNA; cDNA DKFZp564D016 (from clone DKFZp564D016)
-3.56	Hs.47344 advillin
-3.55	Hs.296821 Human facioscapulohumeral muscular dystrophy (FSHD) gene region, D4Z4 tandem repeat unit
-3.53	Hs.2558 bone gamma-carboxyglutamate (gla) protein (osteocalcin)
-3.52	Hs.80741 propionyl Coenzyme A carboxylase, alpha polypeptide
-3.47	Hs.59544 excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence)
-3.47	Hs.248007 Human beta-cytoplasmic actin (ACTBP9) pseudogene
-3.47	Hs.300496 mitochondrial solute carrier
-3.45	Hs.111244 hypothetical protein
-3.44	Hs.193716 complement component (3b4b) receptor 1, including Knops blood group system
-3.37	Hs.79064 deoxyhypusine synthase

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

-3.36	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-3.35	Hs.94229 hypothetical protein FLJ11939
-3.33	gb:M24669.1 /DEF=Human Ig rearranged H-chain V-region mRNA (C-D-JH6), complete cds.
-3.33	Hs.16193 Homo sapiens mRNA; cDNA DKFZp586B211 (from clone DKFZp586B211)
-3.32	Hs.5363 caspase 10, apoptosis-related cysteine protease
-3.32	Hs.117242 meningioma expressed antigen 6 (coiled-coil proline-rich)
-3.3	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-3.29	Hs.203269 ESTs. Moderately similar to ALU8_HUMAN ALU SUBFAMILY SX SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-3.27	Hs.184523 KIAA0965 protein
-3.27	Homo sapiens chromosome 19, cosmid R28784, complete sequence.
-3.26	Hs.21542 KIAA1035 protein
-3.26	Hs.83765 dihydrofolate reductase
-3.25	Hs.283880 Homo sapiens partial mRNA for MOZCBP chimeric transcript type II
-3.24	Hs.168825 androgen-induced prostate proliferative shutoff associated protein
-3.24	Hs.9846 KIAA1040 protein
-3.23	Hs.104916 hypothetical protein FLJ21940
-3.22	gb:BC006222.1 /DEF=Homo sapiens, clone MGC:10279, mRNA, complete cds.
-3.21	Hs.73980 troponin T1, skeletal, slow
-3.2	Hs.85195 myeloid leukemia factor 1
-3.19	Hs.288697 hypothetical protein MGC11349
-3.17	Hs.26899 KIAA0285 gene product
-3.17	Hs.262869 plasminogen-like
-3.16	Hs.226581 COX15 (yeast) homolog, cytochrome c oxidase assembly protein
-3.16	Hs.4854 cyclin-dependent kinase inhibitor 2C (p18, inhibits CDK4)
-3.15	Hs.184938 Novel human gene mapping to chromosome 13
-3.15	Hs.44697 ATPase, Class V, type 10C
-3.14	Hs.25155 neuroepithelial cell transforming gene 1
-3.13	Hs.267263 hypothetical protein
-3.13	Hs.21361 KIAA1023 protein
-3.11	Hs.180686 ubiquitin protein ligase E3A (human papilloma virus E6-associated protein, Angelman syndrome)
-3.11	Hs.86178 M-phase phosphoprotein 9
-3.1	
-3.08	Hs.31324 zinc finger protein 155 (pHZ-96)
-3.06	Hs.61712 pyruvate dehydrogenase kinase, isoenzyme 1
-3.06	Hs.103839 erythrocyte membrane protein band 4.1-like 3
-3.06	Hs.292998 ESTs
-3.05	Hs.31476 Homo sapiens cDNA FLJ13872 fls, clone THYRO1001322
-3.04	Hs.26471 Homo sapiens clone HQ0692
-3.04	Hs.100602 MAD (mothers against decapentaplegic, Drosophila) homolog 7
-3.03	Hs.79993 peroxisomal biogenesis factor 7
-3.03	Hs.82919 cullin 2
-3.02	Hs.1975 hypothetical protein FLJ21007
-3.01	Hs.118738 KIAA0800 gene product
-3	Hs.222306 hypothetical protein MGC3329
-2.99	Hs.100090 tetraspan 3
-2.98	Hs.18889 DKFZP434M183 protein
-2.98	Hs.20019 hemochromatosis
-2.96	Hs.21811 hypothetical protein FLJ10374
-2.92	Hs.308332 ESTs, Highly similar to A42735 ribosomal protein L10, cytosolic H.sapiens
-2.9	Hs.9003 hypothetical protein FLJ13868
-2.89	Hs.234265 DKFZP586G011 protein
-2.88	Hs.26468 amyloid beta (A4) precursor protein-binding, family A, member 2 (X11-like)
-2.85	Hs.68398 period (Drosophila) homolog 1
-2.84	Hs.153639 hypothetical SBB103 protein
-2.84	Hs.184019 Homo sapiens clone 23551 mRNA sequence
-2.82	Hs.5378 spondin 1, (f-spondin) extracellular matrix protein
-2.8	Hs.159900 G protein-coupled receptor 15

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

-2.8	Hs.6179 DEADH (Asp-Glu-Ala-AspHis) box polypeptide 17 (72kD)
-2.8	Hs.323664 nudix (nucleoside diphosphate linked moiety X)-type motif 6
-2.79	Hs.64096 KIAA0427 gene product
-2.78	Hs.94037 hypothetical protein FLJ23053
-2.75	Hs.74861 activated RNA polymerase II transcription cofactor 4
-2.74	Hs.78946 cullin 3
-2.74	Hs.292853 ESTs
-2.73	Hs.300772 tropomyosin 2 (beta)
-2.73	Hs.69746 ferredoxin reductase
-2.73	Hs.75694 mannose phosphate isomerase
-2.71	Hs.113 epoxide hydrolase 2, cytoplasmic
-2.71	Hs.112434 Novel human gene mapping to chromosome 13
-2.71	Hs.27371 Homo sapiens mRNA; cDNA DKFZp566J123 (from clone DKFZp566J123)
-2.7	Hs.287437 Homo sapiens cDNA FLJ11662 fls, clone HEMBA1004629
-2.69	gb:BC006241.1 /DEF=Homo sapiens, hypothetical protein FLJ10647, clone MGC:11318, mRNA, complete cds.
-2.67	Hs.301011 KIAA0878 protein
-2.66	Hs.142245 HERV-H LTR-associating 3
-2.65	Hs.283032 hypothetical protein PRO2015
-2.63	Hs.182595 dynein, axonemal, light polypeptide 4
-2.63	Hs.9071 progesterone membrane binding protein
-2.62	gb:U31110.1 /DEF=Human alternatively spliced trp-1 protein and unspliced trp-1 protein (trp-1) mRNA, complete cds.
-2.62	Hs.168670 peroxisomal farnesylated protein
-2.6	Hs.66191 Homo sapiens clone 24675 mRNA sequence
-2.6	Hs.9198 hypothetical protein
-2.58	Hs.184376 synaptosomal-associated protein, 23kD
-2.58	Hs.27610 retinoic acid- and interferon-inducible protein (58kD)
-2.57	Hs.77868 ORF
-2.57	Hs.77152 minichromosome maintenance deficient (S. cerevisiae) 7
-2.56	Hs.115537 putative dipeptidase
-2.54	Hs.2006 glutathione S-transferase M3 (brain)
-2.54	Hs.7854 zincron regulated transporter-like
-2.53	Hs.19561 NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7 (14.5kD, B14.5a)
-2.53	Hs.72980 Protein P3
-2.53	Hs.262023 Homo sapiens mRNA; cDNA DKFZp564N1623 (from clone DKFZp564N1623); complete cds
-2.53	Hs.79368 epithelial membrane protein 1
-2.52	Hs.23964 sin3-associated polypeptide, 18kD
-2.51	Hs.966 coilin
-2.5	Hs.15898 2,4-dienoyl CoA reductase 2, peroxisomal
-2.49	Hs.118722 fucosyltransferase 8 (alpha (1,6) fucosyltransferase)
-2.49	Hs.278503 regulated in glioma
-2.48	Hs.180338 tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein)
-2.48	Hs.46465 T-cell, immune regulator 1
-2.48	Hs.100915 peroxisomal biogenesis factor 16
-2.48	Hs.119274 RAS p21 protein activator (GTPase activating protein) 3 (Ins(1,3,4,5)P4-binding protein)
-2.46	Hs.50748 chromosome 21 open reading frame 18
-2.46	Hs.25155 neuroepithelial cell transforming gene 1
-2.46	Hs.108779 DKFZP586E1519 protein
-2.46	Hs.82527 sialyltransferase 8 (alpha-N-acetylneuraminate: alpha-2,8-sialyltransferase, GD3 synthase) A
-2.46	Hs.99491 RAS guanyl releasing protein 2 (calcium and DAG-regulated)
-2.44	Hs.143131 glycoprotein A33 (transmembrane)
-2.42	gb:BC006332.1 /DEF=Homo sapiens, clathrin, light polypeptide (Lcb), clone MGC:12930, mRNA, complete cds.
-2.4	Hs.7594 solute carrier family 2 (facilitated glucose transporter), member 3
-2.4	Hs.15984 pp21 homolog
-2.39	Hs.78056 cathepsin L
-2.39	Hs.152981 CDP-diacylglycerol synthase (phosphatidate cytidyltransferase) 1
-2.39	Hs.271699 polymerase (DNA directed) Iota

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

-2.38	Hs.101299 cullin 5
-2.38	Hs.49994 Homo sapiens, clone MGC:10871, mRNA, complete cds
-2.35	Hs.211522 /len=545
-2.35	Hs.78297 G protein-coupled receptor kinase 6
-2.35	Hs.65648 RNA binding motif protein 8A
-2.34	Hs.109655 sex comb on midleg (Drosophila)-like 1
-2.33	Hs.6793 platelet-activating factor acetylhydrolase, isoform Ib, gamma subunit (29kD)
-2.32	Hs.29417 HCF-binding transcription factor Zhangfei
-2.31	gb:NM_031208.1 /DEF=Homo sapiens hypothetical protein FLJ12525 (FLJ12525), mRNA
-2.31	Hs.29725 hypothetical protein FLJ13197
-2.31	Hs.278973 angiotensin-3
-2.31	Hs.238642 3-hydroxyisobutyryl-Coenzyme A hydrolase
-2.31	Hs.111323 Protein inhibitor of activated STAT X
-2.3	Hs.15108 chromosome 14 open reading frame 1
-2.3	Hs.5022 Imprinted in Prader-Willi syndrome
-2.29	Hs.13980 ubiquitously transcribed tetratricopeptide repeat gene, X chromosome
-2.28	Hs.308533 Unlabeled
-2.28	Hs.285737 Homo sapiens cDNA: FLJ20895 fis, clone ADKA03483
-2.27	Hs.183291 zinc finger protein 268
-2.27	Hs.82919 cullin 2
-2.26	Hs.5881 ELL gene (11-19 lysine-rich leukemia gene)
-2.26	Hs.294014 ESTs
-2.25	Hs.62187 phosphatidylinositol glycan, class K
-2.24	Hs.1117 tripeptidyl peptidase II
-2.22	Hs.153299 DOM-3 (C. elegans) homolog Z
-2.22	Hs.250619 phorbol-like protein MDS019
-2.22	Hs.301114 zinc finger protein 79 (pT7)
-2.22	Hs.300741 sorcin
-2.21	Hs.295923 seven in absentia (Drosophila) homolog 1
-2.21	Hs.17775 p75NTR-associated cell death executor; ovarian granulosa cell protein (13kD)
-2.2	Hs.174185 ectonucleotide pyrophosphatase/phosphodiesterase 2 (autotaxin)
-2.19	Hs.2864 early endosome antigen 1, 162kD
-2.19	Hs.321567 complexin 2
-2.19	Hs.31432 cardiac ankyrin repeat protein
-2.18	Hs.77508 glutamate dehydrogenase 1
-2.18	Hs.293495 ESTs, Weakly similar to ALU1_HUMAN ALU SUBFAMILY J SEQUENCE CONTAMINATION WARNING ENTRY H.sapiens
-2.17	Hs.48924 KIAA0512 gene product; ALEX2
-2.17	Hs.16079 hypothetical protein FLJ10233
-2.16	Hs.81424 ubiquitin-like 1 (sentrin)
-2.16	Hs.324730 glutathione S-transferase M1
-2.15	gb:AF019888.1 /DEF=Homo sapiens Arp23 complex 20 kDa subunit (ARC20) mRNA, complete cds.
-2.15	Hs.82143 E74-like factor 2 (ets domain transcription factor)
-2.13	Hs.76297 G protein-coupled receptor kinase 6
-2.13	Hs.241053 ESTs
-2.13	Hs.207805 Homo sapiens mRNA; cDNA DKFZp564I068 (from clone DKFZp564I068)
-2.13	Hs.193163 bridging integrator 1
-2.12	Hs.323820 Homo sapiens GL013 mRNA, complete cds
-2.12	Hs.194637 BANP homolog, SMAR1 homolog
-2.12	Hs.6657 /len=657
-2.12	Hs.920 modulator recognition factor I
-2.11	Hs.5997 hypothetical protein FLJ13078
-2.11	Hs.147916 DEADH (Asp-Glu-Ala-AspHis) box polypeptide 3
-2.11	Hs.237146 hypothetical protein FLJ12752
-2.11	Hs.7236 CGI-25 protein
-2.1	Hs.3530 TLS-associated serine-arginine protein 2
-2.1	Hs.221040 HBS1 (S. cerevisiae)-like
-2.1	Hs.322645 Homo sapiens mRNA; cDNA DKFZp586J101 (from clone DKFZp586J101)

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

-2.09	Hs.57553 tousled-like kinase 2
-2.08	Hs.71746 hypothetical protein FLJ11583
-2.08	Hs.234898 /len=382
-2.07	gb:AF356353.1 /DEF=Homo sapiens spindlin-like protein 2 (SPIN2) mRNA, complete cds.
-2.06	Hs.23240 Homo sapiens cDNA FLJ13496 fis, clone PLACE1004471, weakly similar to ZINC FINGER PROTEIN 83
-2.06	Hs.282344 Homo sapiens cDNA FLJ13387 fis, clone PLACE1001136
-2.06	Hs.283709 lipopolysaccharide specific response-7 protein
-2.05	Hs.110796 SAR1 protein
-2.05	Hs.108947 KIAA0050 gene product
-2.04	Hs.271954 pan-hematopoietic expression
-2.04	Hs.279819 APR-1 protein
-2.03	Hs.279932 CGI-105 protein
-2.02	Hs.178011 hypothetical protein FLJ20257
-2.01	Hs.13226 UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 4
-2.01	Hs.180338 tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein)
-2.01	Hs.16193 Homo sapiens mRNA; cDNA DKFZp586B211 (from clone DKFZp586B211)
-2	Hs.7158 DKFZP566H073 protein
-2	Hs.5002 copper chaperone for superoxide dismutase
-2	Hs.279777 hypothetical protein
-1.99	Hs.264330 N-acylsphingosine amidohydrolase (acid ceramidase)-like
-1.97	Hs.9456 SWISNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5
-1.97	Hs.302114 Human DNA sequence from clone RP5-843L14 on chromosome 20. Contains ESTs, STSs and GSSs. Contains a novel gene and the 5 part of a gene for a novel protein similar to X-linked ribosomal protein 4 (RPS4X)
-1.97	Hs.102 aminomethyltransferase (glycine cleavage system protein T)
-1.97	Hs.75790 phosphatidylinositol glycan, class C
-1.96	Hs.180338 tumor necrosis factor receptor superfamily, member 12 (translocating chain-association membrane protein)
-1.95	Hs.81687 non-metastatic cells 3, protein expressed in
-1.93	Hs.31659 thyroid hormone receptor-associated protein, 95-kD subunit
-1.92	Hs.99847 peroxisome biogenesis factor 1
-1.92	Hs.46736 hypothetical protein FLJ23478
-1.92	Hs.77252 fragile histidine triad gene
-1.91	Hs.153022 TATA box binding protein (TBP)-associated factor, RNA polymerase I, C, 110kD
-1.91	Hs.66180 nucleosome assembly protein 1-like 2
-1.91	Hs.8198 zinc finger protein 204
-1.9	electron-transferring-flavoprotein dehydrogenase
-1.9	Hs.29288 hypothetical protein FLJ21865
-1.9	Hs.244 amino-terminal enhancer of split
-1.89	Hs.279902 cofactor required for Sp1 transcriptional activation, subunit 9 (33kD)
-1.89	Hs.119699 hypothetical protein FLJ12989
-1.89	Hs.156667 KIAA1536 protein
-1.88	Hs.48433 endocrine regulator
-1.88	Hs.8124 PH domain containing protein in retina 1
-1.87	Hs.293219 ESTs
-1.86	Hs.110298 hypothetical protein FLJ13322
-1.86	Human clone 23719 mRNA sequence
-1.86	Hs.152151 plakophilin 4
-1.86	Hs.24284 ADP-ribosyltransferase (NAD ⁺ ; poly (ADP-ribose) polymerase)-like 2
-1.86	Hs.9884 spindle pole body protein
-1.85	Hs.122607 B-cell CLLymphoma 9
-1.85	Hs.7194 CGI-74 protein
-1.84	Hs.322478 KIAA0117 protein
-1.84	Hs.12835 A kinase (PRKA) anchor protein 7
-1.83	Hs.43803 leukocyte-associated Ig-like receptor 2
-1.83	Hs.66708 vesicle-associated membrane protein 3 (cellubrevin)
-1.82	Hs.249495 heterogeneous nuclear ribonucleoprotein A1

FIGURE 8

Table 6
Differential Gene Expression in Medium vs Fugetaxis SDF-1 Gradients

-1.82	Hs.266933 hect domain and RLD 2
-1.81	Hs.119000 actinin, alpha 1
-1.81	Hs.177486 amyloid beta (A4) precursor protein (protease nexin-II, Alzheimer disease)
-1.8	Hs.300684 calcitonin gene-related peptide-receptor component protein
-1.8	Hs.18490 hypothetical protein FLJ20452
-1.8	Hs.279785 putative secreted protein
-1.8	Hs.17409 cysteine-rich protein 1 (intestinal)
-1.79	Hs.301201 Homo sapiens cDNA FLJ14152 fis, clone MAMMA1003089
-1.79	Hs.16803 LUC7 (S. cerevisiae)-like
-1.79	Hs.265561 CD2-associated protein
-1.79	Hs.30696 transcription factor-like 5 (basic helix-loop-helix)
-1.79	Hs.46907 len=807
-1.78	Hs.240112 KIAA0276 protein
-1.78	Hs.41072 serine (or cysteine) proteinase inhibitor, clade B (ovalbumin), member 6
-1.77	Hs.330056 hypothetical protein FLJ22795
-1.77	Hs.5353 caspase 10, apoptosis-related cysteine protease
-1.77	Hs.75081 macrophage myristoylated alanine-rich C kinase substrate
-1.77	gb:NM_031214.1 /DEF=Homo sapiens hypothetical protein (AF311304), mRNA.
-1.76	Hs.285848 KIAA1454 protein
-1.76	Hs.75692 asparagine synthetase
-1.75	Hs.36972 CD7 antigen (p41)
-1.75	Hs.83958 transducin-like enhancer of split 4, homolog of Drosophila E(sp1)
-1.75	Hs.64310 interleukin 11 receptor, alpha
-1.74	Hs.198726 vasoactive intestinal peptide receptor 1
-1.74	Hs.194329 hypothetical protein FLJ21174
-1.74	Hs.102456 survival of motor neuron protein interacting protein 1
-1.74	Hs.26471 Homo sapiens clone HQ0692
-1.74	Homo sapiens Chromosome 16 BAC clone C1T987SK-A-67A1, complete sequence.
-1.74	Hs.158195 heat shock transcription factor 2
-1.74	Hs.306173 phosphatidylinositol glycan, class C, pseudogene 1
-1.73	Hs.9452 KIAA0770 protein
-1.73	Hs.31834 Homo sapiens clone 25129 mRNA sequence
-1.73	Hs.77602 damage-specific DNA binding protein 2 (48kD)
-1.73	Hs.20952 Homo sapiens clone 24411 mRNA sequence
-1.73	Hs.9880 peptidyl prolyl isomerase H (cyclophilin H)
-1.72	Hs.236642 3-hydroxyisobutyryl-Coenzyme A hydrolase
-1.72	Hs.78409 collagen, type XVIII, alpha 1
-1.72	Hs.4764 KIAA0763 gene product
-1.72	Hs.1602 dihydropyrimidine dehydrogenase
-1.72	Hs.404 myeloid lymphoid or mixed-lineage leukemia (trithorax (Drosophila) homolog); translocated to, 3
-1.71	Hs.301667 Homo sapiens mRNA; cDNA DKFZp566I043 (from clone DKFZp566I043)
-1.71	Hs.180895 putative brain nuclearly-targeted protein
-1.71	Hs.128646 hypothetical protein FLJ20639
-1.71	Hs.184736 hypothetical protein FLJ10097
-1.71	Hs.9222 estrogen receptor binding site associated, antigen, 9
-1.7	Hs.30783 hypothetical protein FLJ20850
-1.7	Hs.110477 dolichyl-phosphate mannosyltransferase polypeptide 3

FIGURE 9

Table 7

Chemotaxis versus Fugetaxis: Downstream transcriptional changes

Actin/Cytoskeletal

Increased in Chemotaxis

Increased in Fugetaxis

2.97	Spectrin beta, non-erythrocytic 1	3.05	Microtubule-associated protein, RPEB3
2.62	Myosin, light polypeptide 5, regulatory	2.81	Plectin 1, intermediate filament binding protein
2.52	Keratin 1	2.46	Microtubule-associated protein 1A like protein (MILP)
1.98	Plakophilin 4	2.20	Ankyrin 1, erythrocytic
1.81	Capping protein (actin filament), muscle	2.08	Capping protein (actin filament), gelsolin-like

ECM/Adhesion

Increased in Chemotaxis

Increased in Fugetaxis

14.00	Collagen, type XVIII, alpha 1	11.00	Chitinase 3-like 1 (cartilage glycoprotein-39)
4.73	Spondin 1 (f-spondin)	3.71	Epithelial V-like antigen 1
3.47	CD31 adhesion molecule	2.99	Vascular endothelial growth factor (VEGF)
3.33	Tetraspan 3	1.71	Fibulin 1
2.13	Glycoprotein A33	1.70	Carcinoembryonic antigen-related cell adhesion molecule 3

T-cell activation

Increased in Chemotaxis

Increased in Fugetaxis

5.76	Stat2 type a	4.71	MHC class II transactivator
3.22	Interleukin 21 receptor	2.65	T-cell receptor, alpha chain
2.20	T-cell, immune regulator 1	2.00	T-cell activation, increased late expression
		1.88	MKP-1 like protein tyrosine phosphatase
		1.72	T-cell receptor gamma constant 2
		1.70	T-cell receptor gamma locus

Migration related

Increased in Chemotaxis

Increased in Fugetaxis

2.90	angio-associated, migratory cell protein	5.15	chemokine (C-X3-C) receptor 1
		3.24	EphA1 receptor
		2.40	ephrin-A5

FIGURE 10

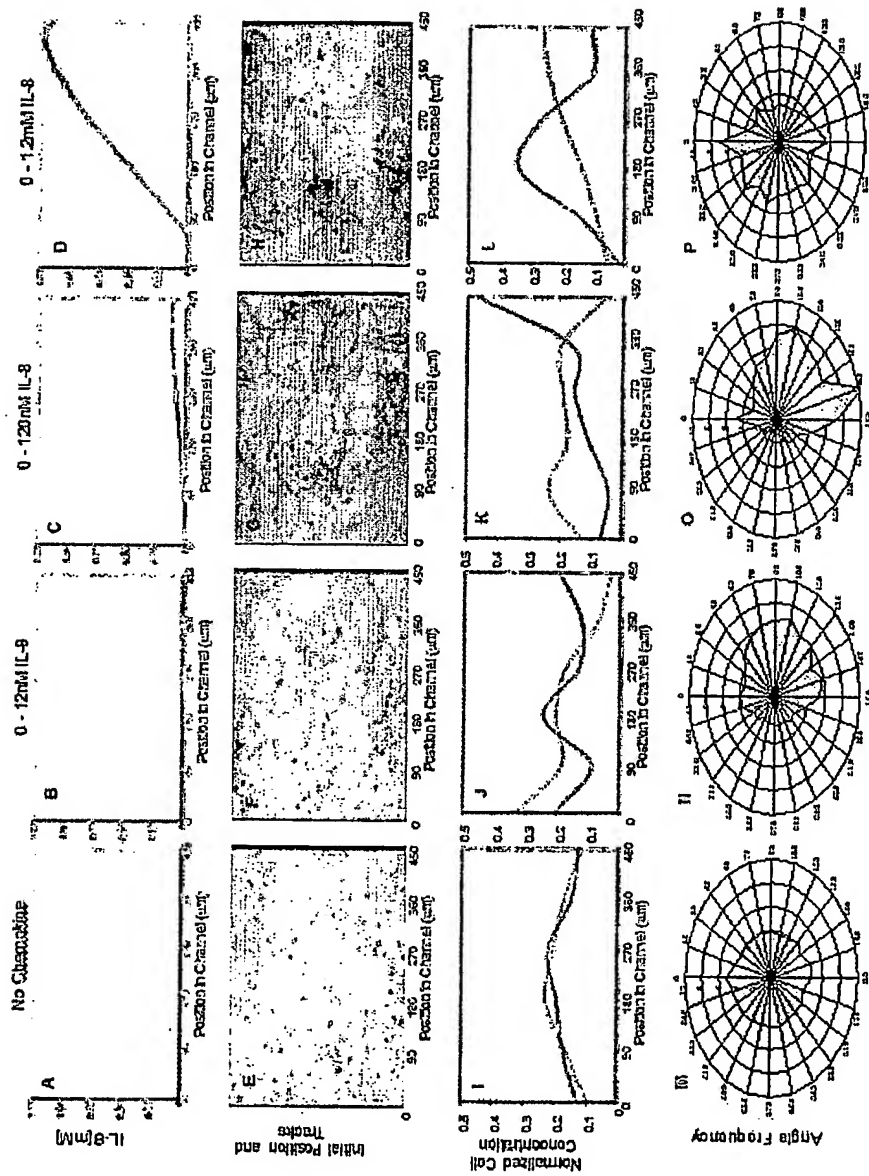


FIGURE 11

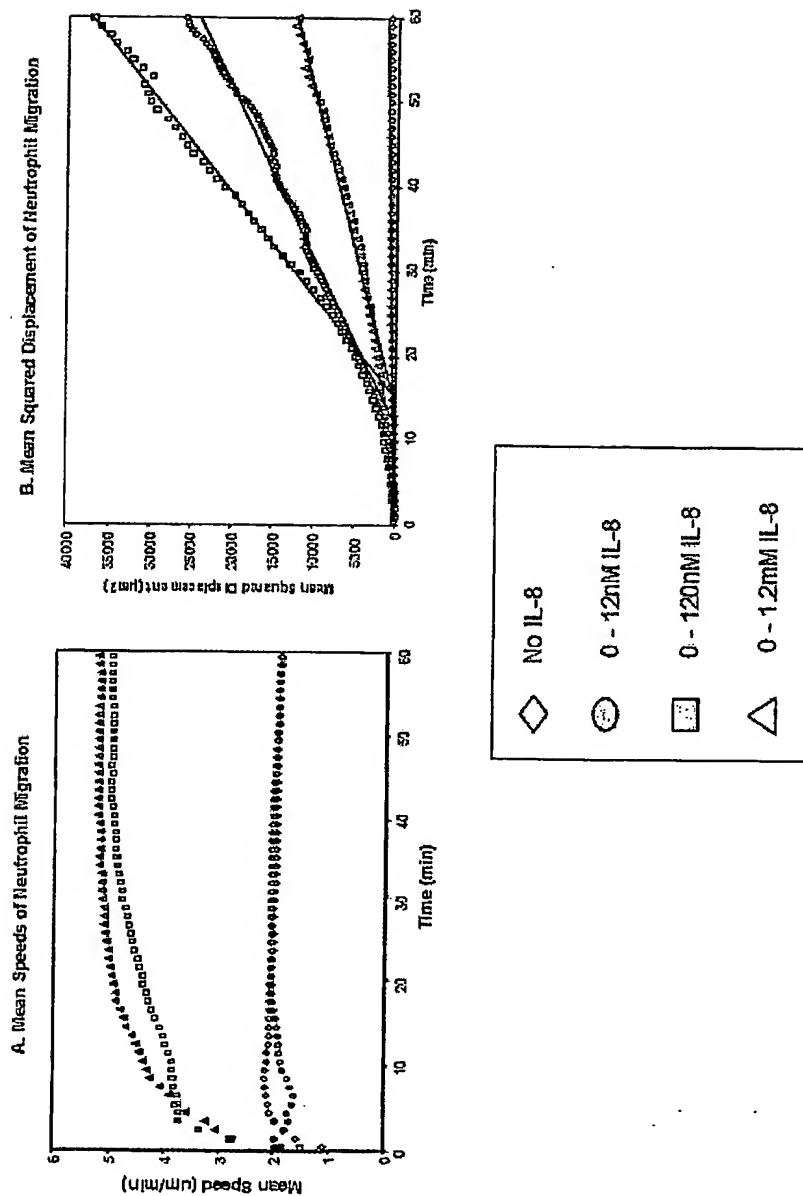


FIGURE 12

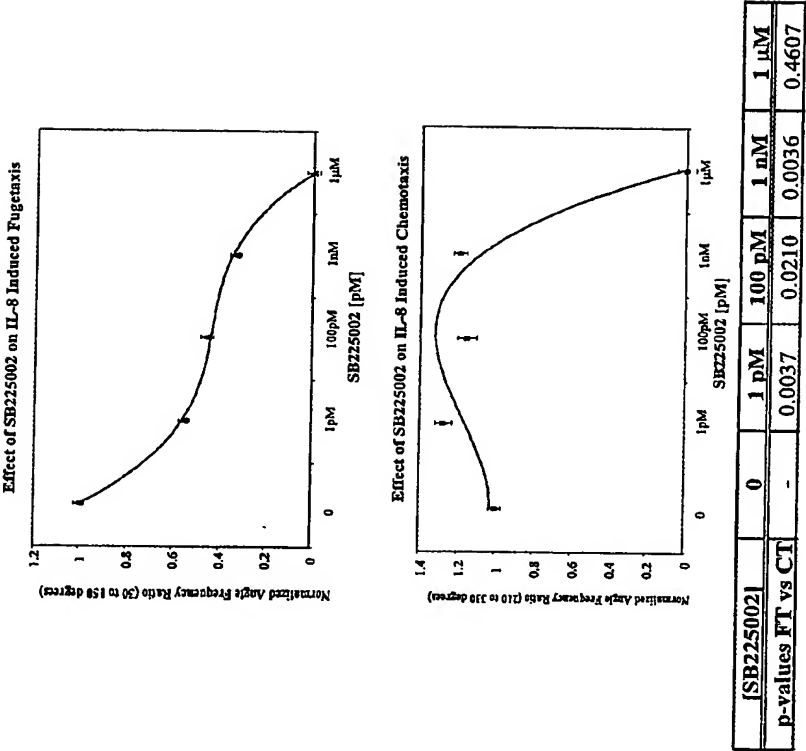


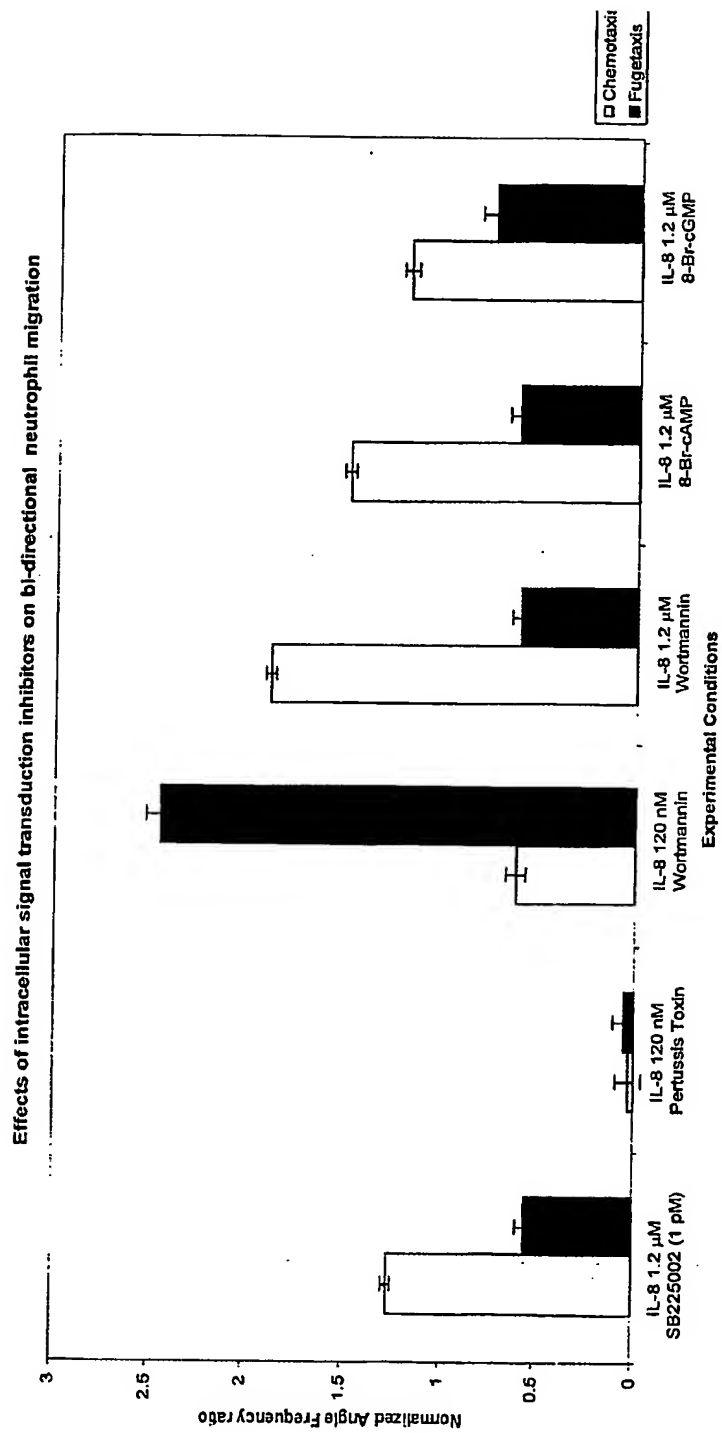
FIGURE 13

FIGURE 14

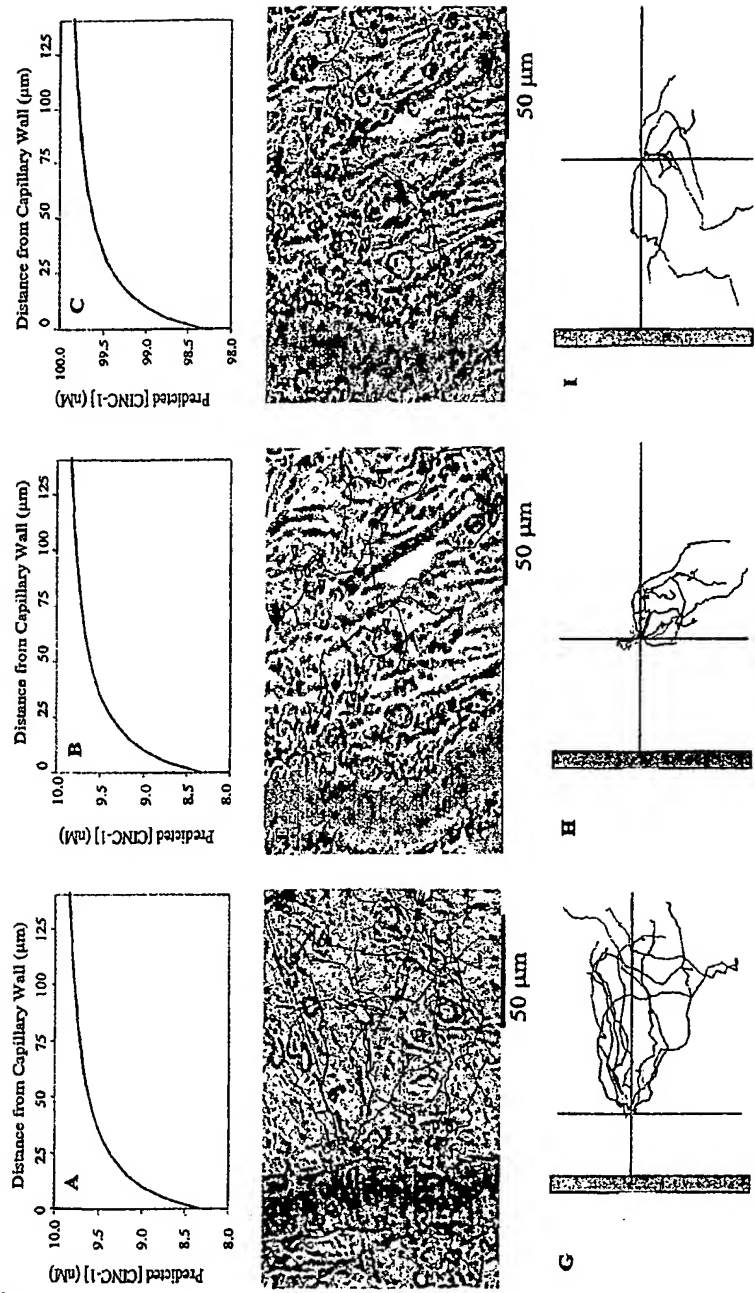


FIGURE 15
TABLE 8

Generated Gradient Parameters		Number of Cells	Mean Speed ($\mu\text{m}/\text{min}$) +/- SD	Random Motility Coefficient ($\mu\text{m}^2/\text{min}$)	Persistence Time (min)	Mean Chemotaxis Index (MCI)	p-values (vs. no IL-8)	Sectional MCI (low, mid, high)	p-values Sectional MCI (low to mid, low to high, mid to high)
Peak [IL-8]	Gradient ($\Delta \text{nM}/\mu\text{m}$)								
No IL-8	0	128	2.12 +/- 0.05	4.7	0	-0.02 +/- 0.01	-	-0.03, -0.03, -0.01	0.43, 0.15, 0.16
120 nM IL-8	0	50	4.13 +/- 0.89	34.7	4.5	-0.00 +/- 0.02	0.138	-0.00, -0.01, 0.02	0.48, 0.38, 0.37
12 nM IL-8	0.0267	76	1.96 +/- 0.05	168.7	21.5	0.32 +/- 0.03	< 0.0001	0.40, 0.28, 0.21	0.04, 0.01, 0.25
120 nM IL-8	0.267	87	4.77 +/- 0.06	217.9	21.8	0.39 +/- 0.03	< 0.0001	0.44, 0.42, 0.25	0.39, 0.001, 0.01
1.2 μM IL-8	2.67	80	5.10 +/- 0.04	67.2	10.9	-0.13 +/- 0.02	< 0.0001	0.20, -0.14, -0.22	< 0.0001, < 0.0001, 0.03

FIGURE 16
TABLE 9

Superfusion [CINC-1] (nM)	Number of Cell Tracks/steps Analysed	Mean Speed ($\mu\text{m}/\text{min}$) +/- s.e.	Random Motility Coefficient ($\mu\text{m}^2/\text{min}$)	Persistence Time (min)	Persistence Index +/- s.e.	Mean Chemotropism Index (MCI) +/- s.e.	MCI p-values vs (10 nM 10-90)
10	12/2160	7.71 +/- 0.63	127.45	4.27	0.55 +/- 0.08	0.51 +/- 0.08	-
10	6/1080	7.70 +/- 0.43	64.57	2.31	0.56 +/- 0.09	0.32 +/- 0.06	0.075
100	4/ 360	7.87 +/- 0.87	135.11	5.25	0.67 +/- 0.05	-0.35 +/- 0.12	< 0.0001